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The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

DEPARTMENT OF LABOR AND INDUSTRIES

FOR THE

Year Ending November 30, 1933

Publication of this document approved by the Commission on Administration and Finance
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The Commonwealth of Massachusetts

DEPARTMENT OF LABOR AND INDUSTRIES

OFFICIALS

EDWIN S. SMITH, FRAMINGHAM, COMMISSIONER.
MARY E. MEEHAN, BOSTON, *Assistant Commissioner.*
JOHN L. CAMPOS, FALL RIVER, *Associate Commissioner.*
EDWARD FISHER, LOWELL, *Associate Commissioner.*
HERBERT P. WASGATT, WABAN, *Associate Commissioner.*

HEADS OF DIVISIONS AND BRANCHES

Board of Conciliation and Arbitration:
EDWARD FISHER. JOHN L. CAMPOS. HERBERT P. WASGATT.
Division of Industrial Safety: JOHN P. MEADE, *Director.*
JOSEPH MONETTE, *Counsel.*
MANFRED BOWDITCH, *Occupational Hygienist.*
Division of Minimum Wage: MARY E. MEEHAN, *Acting Director.*
EDWARD FISHER. JOHN L. CAMPOS. HERBERT P. WASGATT.
Division on the Necessaries of Life: RALPH W. ROBART, *Director.*
Division of Public Employment Offices: M. JOSEPH MCCARTIN, *Director.*
Division of Standards: JOHN P. MCBRIDE, *Director.*
Division of Statistics: ROSWELL F. PHELPS, *Director.*
MARGARET SHEA, *Statistician for Manufacturers.*
LESTER E. ARCHIBALD, *Statistician for Labor.*
Massachusetts Industrial and Development Commission:
BRADBURY F. CUSHING, *Chairman*, MAX SHOOLMAN, ANDREW RAEBURN, ROBERT J. WATT, PAUL E. FITZPATRICK, *Members Ex-officiis*, EDWIN S. SMITH, *Commissioner of Labor and Industries*, ARTHUR W. GILBERT, *Commissioner of Agriculture.*
JOHN T. SCULLY, *Executive Secretary.*

REPORT OF THE COMMISSIONER OF LABOR AND INDUSTRIES

To the General Court:

In rising out of the depression Massachusetts business, like that in other states, began to rid itself of the extreme examples of labor exploitation which had caused this Department so much concern last year. While wages in Massachusetts' sweatshops had never reached quite the low levels that were reported elsewhere, earnings of workers in the Fall River and New Bedford needle-trade factories had become alarmingly out-of-line with American tradition. The advent of the codes and business improvement have greatly bettered this situation and it is to be hoped that the better grade of men's and women's garment factories will continue to operate in these cities. Both Fall River and New Bedford have long suffered from lack of diversity in manufacture. Growth of the garment industry in their midst may prove a valuable addition to the cotton textile industry in sustaining their population and adding to their wealth.

REVIVAL OF TEXTILE INDUSTRY

Most encouraging, of course, not only for Fall River and New Bedford but for Lowell, Lawrence and other communities has been the extensive revival of the cotton textile industry in Massachusetts. The speculative buying of cotton and its products in the spring of 1933 followed by the definite restoration of competitive advantages which Massachusetts received through the cotton textile code have resulted in notable increases in payrolls and employment in that industry. From May of 1933 to November, 1933, the index of employment rose 54%, and in the same period the payroll index rose 80.7%.

The Massachusetts cotton textile industry has been fortunate in the leadership of a number of broad-minded and far-seeing men, such as Robert Amory and Henry P. Kendall. It was a cause for rejoicing to many who have lamented the "feudal" characteristics of the Massachusetts cotton textile industry in the past to see it, under wise direction, hastening to be the first industry to go under a code, and embarking on an apparent program of friendly relationship with organized labor.

In March of 1933 two meetings of employers and representatives of labor in the various branches of the textile industry were held in Massachusetts, one at the call of the Governor and the other at the call of the Commissioner of Labor and Industries. In view of the national action finally taken the resolution adopted at the second of these meetings on March 27 is of considerable interest. The resolution read in part:

"Whereas there exists in all branches of the textile industry serious unemployment and a serious state of overproduction detrimental to the interests of both employer and employe, be it resolved;

"That this committee recommends to Governor Ely that he appoint a committee representing the textile industry in Massachusetts, with the Governor serving as chairman, to urge upon the President of the United States and the Secretary of Labor emergency action to bring about uniform hours of labor and elimination of the employment of women and minors at night in the textile industry, and also to discuss with the President and the Secretary the furtherance of permanent action looking toward equalization of labor laws among the states."

In pursuance of this resolution a delegation consisting of Governor Ely, Henry P. Kendall, William E. G. Batty, Secretary and Business Agent of the Textile Council of the United Textile Workers of America, and the Commissioner of Labor and Industries went to Washington and laid before the President and Secretary Perkins suggestions for greater uniformity in labor laws.

Interstate Action on Labor Laws

Massachusetts having in the past pioneered so extensively in labor legislation and, in the cotton textile industry at least, having suffered a competitive disadvantage on this account*, is naturally interested in any program which looks toward unifying as well as raising labor standards in other states. A Second Interstate Conference on Labor Laws was called by Governor Ely in Boston in January, 1933. This conference was attended by representatives of the labor departments of Connecticut, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Massachusetts, and of the U. S. Department of Labor.

Like the First Conference at Harrisburg, Pa., in June, 1931, the Boston Conference adopted various specific proposals for uniform legislation and also suggested that the northeastern states should enter into a compact as a practical means of achieving such uniformity.**

An important practical step toward this goal was taken later on in the year when the Massachusetts legislature passed a bill, introduced by Senator Henry Parkman, to create a Massachusetts Commission on Interstate Compacts on Labor Laws. The members of this Commission are: Legislative members — Senator Henry Parkman, Jr., Chairman; Representative James W. Clark, Vice-Chairman; Representative Henry Cabot Lodge, Jr.; Representative James P. Meehan; By appointment of the Governor — Robert Amory; Robert J. Watt; Edwin S. Smith. Under the able leadership of its chairman, Senator Parkman, the Commission has begun the practical building up of a program for interstate action on labor legislation, which may have far-reaching results. Even if the N.I.R.A. codes, or some other form of national unification of labor standards, becomes a permanent part of our economic scheme (which is certainly to be desired) there is bound to be a large field for useful interstate action still open. One can imagine, for instance, great good coming out of an interstate program which will seek to unify workmen's compensation measures.

*How large a factor our more liberal labor legislation was in the decline of the industry in Massachusetts will probably never be known as the shrinkage here was due to a complex of causes.

**The proposal for a compact on uniform labor laws was very persuasively advanced by Professor Felix Frankfurter in an address to the Conference.

Suspension of the Six O'Clock Law

The statute which prevents the employment of women in textile mills after 6 p.m. has been a source of bitter contention in Massachusetts ever since it was adopted in 1907. Efforts by the textile employers and the Associated Industries to overthrow the statute by legislative action have been continual but without result. However, with the coming of the cotton textile code a new aspect appeared to be given to this perennial problem. It was argued that since we were assured, during the life of the Recovery Act, substantially uniform and, on the whole, decidedly liberal national labor standards in the textile industries, Massachusetts could now afford to relax the severity of its 6 o'clock prohibition in order that the mills in this state might take full competitive advantage of the opportunities for revival of the cotton and other textile industries which the codes appeared to offer. The executive committee of the State Branch of the American Federation of Labor favored such a course, as did the Governor and the Commissioner of Labor and Industries. Against the opposition of some representatives of organized labor, as well as other interests, legislation was finally passed which permitted, for the life of the N.I.R.A., the Commissioner of Labor and Industries to allow suspension of the 6 o'clock law in the textile industry (and the leather goods industry) under such regulations as he might impose. The regulations issued for the various branches of the textile industry appear in an appendix to this report. Each was decided upon after consulting, at a joint meeting, the views of employers and representatives of organized labor in the industry.

A questionnaire addressed to concerns in the cotton textile industry showed that not only were the regulations for that industry being observed but that a smaller proportion of women was being employed at night than was allowed. In the fifty-four establishments which operated night shifts during the week ending September 30, 1933, the total number of persons employed on such shifts was 12,426, of whom 3,149 or 25.3 per cent were women.

No regulations have to date been issued for the leather industry because there has been no indication of an intention on the part of employers to employ women after 6 o'clock at night in this industry.

Division of Industrial Safety Changes

A number of administrative changes have been incorporated in the work of the Division of Industrial Safety which it is believed will add to the efficiency of the Department's efforts. These are referred to in the report of the Director of that Division. The principal changes were: extension of the "block" system of inspection, inauguration of systematic evening inspections, adoption of a central history card, on which all the important facts of the Department's contact with each establishment in the state will be noted. The device of the central history card was borrowed from the Labor Department of the State of New York.

Public Works, Minimum Wage, Employment Offices

Despite the short daily hours prescribed by most codes and in the President's Reemployment Agreement, it is surprising to note in how many instances evening inspections revealed the employment of women at daily hours in excess of the nine allowed by state law.

Because public works were undertaken largely during the past year by means of federal funds and under federal supervision of labor conditions, the Department's responsibility for law observance in this field has temporarily undergone a considerable shrinkage. Nevertheless, systematic inspection has been kept up and co-operation extended to other agencies charged with supervising these public works.

The report of the Minimum Wage Commission indicates somewhat greater compliance with wage decrees due to the advent of the Codes and better times. Nevertheless, the need for a mandatory minimum wage law, if this work is to become effective, was never more apparent.

The activities of the Public Employment Office Division have been greatly expanded due to the passage of the Wagner-Peyser bill by the United States Congress. The changes that have taken place are described in the report of the Division. They betoken a much increased usefulness of the employment offices to employers and employees and a quantitative and qualitative improvement of its work.

Illegal Selling of Newspapers

Two problems which have caused the Department much concern are the illegal employment of children in public performances, as newsboys, and in other street trades. In connection with the problem of exhibiting children at vaudeville performances a special letter calling attention to the provisions of the law was sent over the Commissioner's signature to the mayors and selectmen of the cities and towns and also the managers of local theatres.

The summer produced a veritable epidemic of small children illegally engaged in selling lemons on the Boston streets. Some attention was given to this problem but the inspectors experienced difficulty in tracing the source of supply, the Department's desire being to prosecute not the children but the agency which sold them the fruit.

A more serious because more extended problem concerned with illegal child labor is that presented by the newsboys, particularly in connection with the sale of a Boston tabloid newspaper which appears in the evening and is sold widely in Greater Boston and surrounding cities. Investigation by the Massachusetts Child Labor Committee, the police of Boston and the inspectors of this Department showed flagrant violations of the law taking place in connection with the sale of this paper. Children without badges and less than 12 years of age were in many instances found selling copies of this paper in the street late in the evening. Sale by agents of the newspapers to children obviously under age and without badges was frequently observed by our inspectors. The co-operation of the publishers of the paper was sought in suppressing this practice and promises of reform were made. Some evidence of improvement have been noted but the evil has been allowed to flourish so long that the cure appears proportionately delayed. Consultations with school authorities have disclosed the deleterious effects on the health, and also on their standing in their school subjects, of young children whose evening hours are spent in selling newspapers in the streets.

Newspaper selling has long been accepted by social workers as a breeding ground for begging and other practices which may lead to delinquency. In addition to these evils the pay received by the children is pitifully small.

The entrance into the newspaper field of tabloids issued in the evening and sold on the streets at late hours to patrons of theatres, athletic exhibitions, etc., has greatly intensified one of the most serious child labor problems which confronts labor law administrators. There are many ways in which a newspaper can under Massachusetts statutes disclaim legal responsibility for sales to children, notably by restricting original sale of the papers to older boys who in turn sell to the younger. The actual sale to a child under age is difficult to witness because the presence of a stranger at the newspaper office or delivery point is quickly observed and procedure adjusted accordingly. Perhaps public conscience may be aroused to the point of causing the newspaper publishers to take more drastic preventive measures to bring their practice into conformity with both the letter and the spirit of the law. Perhaps the newspaper code will prove helpful. Certainly as things now stand the custom of selling papers at night by children under twelve is a disgrace to Boston and nearby cities and a menace to growing youth.

Children on Tobacco Plantations

The problem of child labor in the tobacco fields appears to be definitely on the mend, if not solved. The last annual report mentioned the voluntary agreement entered into by the Connecticut and Massachusetts growers with the labor departments of their respective states not to employ children under fourteen. This summer a visit to the fields was undertaken by the Commissioners of the two labor departments, members of their staffs, Miss Margaret Wiesman, executive secretary of the Consumer's League of Massachusetts, and Captain Dwight Hughes, Jr., in charge of the C.C.C. camp at Hartland, Ct., who was kindly permitted by the Commanding Officer of the First Corps Area, Army Base No. 1, Boston, to accompany the investigators, particularly for the purpose of advising with us on sanitary conditions. Neither in Massachusetts nor Connecticut was there evidence of employment of children under fourteen. The provisions for toilet accommodations near the sheds were much better than on the occasion of our visit the previous year. Atrocious conditions were found in some of the plantation "boarding houses."

However, this is a Connecticut rather than a Massachusetts problem, as there are no more boarding houses for tobacco workers maintained in Massachusetts. The Connecticut growers promised to remedy the living conditions brought to their attention.

Investigations undertaken last year by the Assistant Commissioner, Miss Mary E. Meehan, showed illegal child labor and filthy living conditions on a number of Cape Cod cranberry bogs. Meetings with the growers led to the laying out of a specific program for doing away with these evils. Visits by inspectors of the department this year showed decided improvement but in two cases cranberry growers were brought into court for violation of law.

A considerable portion of the Commissioner's time was given to serving on the Special Industrial Disease Commission of which he was chairman and which reported to this year's legislature. The Commissioner also served on the Commission on Interstate Compacts. He appointed John P. Meade, Director of the Division of Industrial Safety, to serve as his representative on the Special Commission on the Advisability of Licensing Contractors and Builders, and Mr. Lester E. Archibald of the Division of Statistics to serve as his representative on the Special Commission to Investigate relative to State Assistance to Veterans in acquiring Farms and Homes.

The Commissioner was named by the President as one of the four official United States' observers to attend the International Labour Conference in Geneva in June of 1933.

The Department was asked by the U. S. Department of Labor to undertake the issuing of certificates permitting the employment of handicapped workers, under certain limitations, at less than the minimum wages prescribed by the President's Reemployment Agreement. To assist him in this work the Commissioner appointed an advisory committee consisting of the following persons: Mr. Francis Clark, Vice-President, Plymouth Cordage Company; Mr. Herman Koster, Business Agent, Firemen & Oilers Union; Mr. Robert O. Small, Director, Division of Vocational Education of the State Department of Education; Mr. Herbert A. Dallas, in charge of the rehabilitation work of the Department of Education; Dr. Raymond A. Kinmonth, Assistant to the Commissioner, Massachusetts Department of Mental Diseases; Mr. M. Joseph McCartin, Director, State Public Employment Service; Mr. Fred J. Graham, Supervisor of Rehabilitation Activities, State Employment Service. Later the authority for granting these certificates was extended to cover many codes. Responsibility for the carrying on of this work has been delegated to the Assistant Commissioner.

EDWIN S. SMITH,
Commissioner of Labor and Industries.

FINANCIAL STATEMENT FOR 1933

Income

Division of Standards

Collected in fees and paid into the treasury of the commonwealth	$68,021.06
Collected in fees and paid into treasuries of the cities, towns and counties of the commonwealth	37,922.00
Penalties for violations of hawkers and pedlars laws	356.00
	$106,299.06

Expenditures

Account	Appropriations	Expenditures	Unexpended Balance
Administration			
Commissioner and associates	$18,884.00	$18,883.33	$ .67
Clerical assistance to commissioner	6,820.00	6,819.97	.03
Division of Industrial Safety			
Personal services and expenses	153,389.89	152,695.46	694.43
Division of Statistics			
Personal services and expenses	58,773.64	58,758.50	15.14
Division of Public Employment Offices			
Personal services	55,125.00	55,103.32	21.68
Expenses	13,142.00	12,948.95	193.05
Board of Conciliation and Arbitration			
Personal services	19,580.00	15,604.50	3,975.50
Expenses	3,647.97	2,026.87	1,621.10
Division of Minimum Wage			
Personal services	14,420.00	13,786.88	633.12
Expenses	5,238.01	3,516.23	1,721.78
Wage boards	2,500.00	–	2,500.00
Division of Standards			
Personal services	29,385.00	29,385.00	–
Expenses	17,068.08	8,715.23	8,352.85
*Massachusetts Industrial and Development Commission**			
Personal services	4,850.00	4,750.97	99.03
Expenses	2,331.44	1,921.56	409.88
Division on the Necessaries of Life			
Personal services	11,920.00	11,870.00	50.00
Expenses	1,976.56	1,623.98	352.58
Totals	$419,051.59	$398,410.75	$20,640.84
Recapitulation			
Officials	$18,884.00	$18,883.33	$ .67
Personal services and expenses	397,667.59	379,527.42	18,140.17
Wage boards	2,500.00	–	2,500.00
Totals	$419,051.59	$398,410.75	$20,640.84

*Commission abolished May 31, 1933.

REPORT OF THE DIVISION OF INDUSTRIAL SAFETY

JOHN P. MEADE, *Director*

INSPECTION WORK

During the year the task of dividing the inspectors' districts into "blocks" which was begun a few years ago was completed for the entire State. Under the block system of inspection, which has now been fully put into effect, each inspector goes from one business establishment to the next in each "block" in his district until the area has been entirely covered. He does not leave his block except when directed to investigate a complaint or an accident which has occurred in some other section of his district. "Block" inspection insures systematic inspection of all work places in each district as required by statute.

Regular evening and Sunday inspection were instituted for the principal purpose of uncovering instances of employment of women and minors beyond the legally allowed daily or weekly hours. These inspections have resulted in the reporting of numerous violations of labor laws. The inspectors are given time off for this extra work, which is undertaken in addition to their regular tours of duty.

During the year the districts of all inspectors were shifted in order to give them the added training and interest which comes from working in new fields. These shifts were accomplished within limited areas so that the inspectors were not obliged to move into new homes.

SUMMARY OF ACTIVITIES

There was a total of 40,299 inspections and 8,948 reinspections made. The following table summarizes the activities of the inspection force for the year ending November 30, 1933:

Inspections

Mercantile	21,810	Road operations	755
Mechanical	10,572		40,299
Manufacturing	2,114		
Building operations	3,291	Reinspections	8,948
Painting	1,757	Inspections and reinspections	49,247

Visits

Complaints	4,412	Homework	170
Accidents	1,391	Total Visits	6,463
Occupational diseases	490		

Total inspections and visits . 55,710

Complaints Received

Women and Minors		*Public Works*	
Overtime	726	Overtime employment	6
Minors		Citizens' preference	41
Employed under 14 years	14	Veterans' preference	50
Employed without certificate	30	Laborers' vacation	3
Employed in prohibited trades and on dangerous machinery	3	Prevailing rate of wages	5
Illegal exhibition of children	8		85
	55	*Illegal Advertising*	10
		Labor General	
Time Notices		One day's rest in seven	87
Not posted	16	Holiday employment	2
Improperly posted	1	Fines	6
Time other than stated	7	Homework	5
		Lunch period	2
	24		102

Unguarded machinery	5
Health and Sanitation	
Toilet and washing facilities	93
Locked doors	5
Lighting	5
Ventilation	41
Medical kit	5
Seats	6
Drinking water	11
	166

Building Operations	57
Complaints	1,230
Non-payment of wage complaints	2,225
Total complaints	3,455
Homework licenses granted	259
Painters' registrations	393

Orders Issued

Labor: Employment of women and minors, 82; posting time notices, 3,455; minors employed in prohibited trades or on dangerous machinery, 7; public exhibition of children, 1; procuring and returning certificates, 2,697; one day's rest in seven, 429. Total, 6,671.

Health: Ventilation, humidity, dust removal, drinking water and core rooms, 354; lighting and injury to eyes, 268; toilet and washing facilities, 1,920; meal hours, seats for women, lockers, 73; common drinking cup and towel, 120; first aid rooms and medical chest, 840; casters on boxes 75 pounds and over, 1. Total, 3,576.

Safety: Communication with engine room, 20; safeguarding machinery, 1,959; free egress, 137; unguarded openings, 31; shuttle guards, 8. Total, 2,155.

Miscellaneous: Tickets to weavers, 1; weavers' specifications, 3; homework lists, 9; apprentice without pay, 1; deduction for tardiness, 1. Total, 15.

Building Operations: 587; painting operations, 517.

Public Works: Citizens' preference, 71; 8-hour day, 48-hour week, 7; prevailing rate of wages, 2; weekly payment of wages, 3.

Totals: Orders issued, 13,604; orders complied, 13,541, which included 5,684 verbal orders which were complied at time of issuance; 28 orders were cancelled on account of firms going out of business. Orders outstanding December 1, 1933, numbered 1,191.

Hours of Labor for Women

Inspections were made in 34,496 manufacturing, mechanical and mercantile establishments. Telegraph offices and telephone exchanges, express and transportation companies, motion picture theatres, manicuring and hairdressing establishments, and office buildings in which women elevator operators were employed were also inspected. When necessary, instructions were given to responsible persons in the establishment visited regarding the posting and proper making out of time notices for female employees.

Enforcement of the statutes restricting the period of employment for women and minors during the evening hours was accomplished largely by night inspection of industrial establishments, particularly in districts where manufacturing concerns employed such persons in shifts during this peak season. Evening shifts employing women are general in dressmaking and garment shops, in shoe factories, bakeries, and in the manufacture of candy, fur, jewelry. Restaurants and lunch rooms where women are employed at night were given close attention. Under the statutes women may work in these places at any hour of the night or any day of the week if above twenty-one years of age, although subject to the restriction of not more than nine hours' work in one day nor more than forty-eight hours in a week. Possible illegal employment of women in hotels at night is difficult to detect because of the numerous shifts used. Investigations were often made on occasions when large numbers of persons were congregated at hotels and violations were therefore more likely to occur.

Special inspection of seashore establishments was as usual carried on during the summer. Parks and amusement places in various parts of the State were visited at this season. Special visits were made to these places on holidays and Sundays and during the evening hours to detect overtime employment of women or children. Because of the frequent labor turnover, constant oversight of such places is necessary.

The part of the general public in the enforcement of the statutes restricting the hours of labor for women and minors is shown by the 726 complaints coming to the Department from this source. Evidence was found which definitely substantiated one hundred and eighty-five of these complaints.

One of the difficulties encountered by the Department in manufacturing establishments where piece rates prevail is the tendency for women to work at times other than stated on the time notice. Piece workers are irregular as to their times of coming to work and leaving work. Inspectors made frequent visits to such plants and checked up regularly the employment of women with special reference to observance of the working hours as posted.

Child Labor

Constant attention is necessary to see that children are not employed in proximity to dangerous machinery.

Two hundred and forty-six orders were issued requiring the employer to obtain employment certificates for children. In determining whether children were lawfully employed, their alleged hours of attendance at continuation school were verified in many cases. Special attention was given to establishments where children were given causal employment, such as private bowling alleys, roadside stands, theatres, dance halls and chain stores. The co-operation of school superintendents, attendance officers and public officials in the enforcement of statutes protecting employed children was continued during the year. Violations of the child labor law were quite frequently found at amusement parks and beach resorts, notably the practice of permitting children under sixteen years of age to work after six o'clock in the evening.

The usual practice of checking up on the employment of children by milk drivers in the early hours of the morning was carried on in the urban districts of the State. Much assistance was received from police officers in this connection and through the medium of such co-operation a great deal was accomplished in preventing one of the most harmful types of child labor.

The unlawful appearance of children in theatrical and dancing exhibitions received much attention from this Division. A special letter was sent by the Commissioner to all proprietors of motion picture theatres where vaudeville entertainments take place, calling their attention to the provisions of the statutes regarding the employment of children on the stage.

Providing Seats for Women and Children

Sixty-two orders were issued requiring that seats be provided for women and minors.

Industrial Safety

During the year 1,959 orders were issued by the Department for the safeguarding of machinery. These included bringing power transmission machinery parts into conformity with the requirements of the safety rules and regulations and machinery standards of the Department, as well as the safeguarding of hazardous machinery at the point of operation. Many orders were issued in connection with machinery where interlocking devices are used, and in connection with metal-grinding machinery; safeguarding of saws, jointers and planers in wood-working establishments; stamping and punch press machinery and shears for cutting steel in the metal trades. The guarding of machinery was stressed in shoe factories, tanneries, textile mills (woolen, cotton and rayon), foundries, wood-working establishments, slaughter and meatpacking establishments, factories making electrical machinery apparatus and supplies, motor vehicles, jewelry and soap. Although allowance must be made for decreased exposure hours in 1932, comparison made with accidents of this type in 1919 leads to the conclusion that the large falling off is due in considerable measure to the regular inspection of establishments where machinery is used. This is clearly indicated in the following table taken from official records:

Machinery Accidents by Manner of Occurrence

	1919	*1932*
Starting, stopping or operating machinery	9,675	2,368
Adjusting machine, tool or work	1,758	300

Machinery Accidents by Manner of Occurrence — Continued

	1919	1932
Hit by flying objects	3,285	418
Cleaning or oiling machines	1,298	270
Breaking of machine, tool or work	620	175
Repairing machine	223	79
All other	1,631	1,275
	18,490	4,885

In 1919 out of a total of 67,240 tabulatable accidents, 1,750, or 2.6%, included permanent partial disability injuries. In 1932 there were 42,067 tabulatable injuries, of which 864, or 2.0%, resulted in permanent partial disability. These accidents included loss of fingers, thumbs, hands, toes, feet, limbs and the sight of eyes. Comparative tables of such accidents, which usually result in loss of wage-earning capacity, follow:

Specific Injuries	1919 Number of Cases	Per cent of Total
One finger or thumb lost at or above first joint	1,109	73.1
Two fingers on one hand	171	11.2
One eye	115	7.6
One hand	60	3.9
One toe	25	1.6
One foot	15	1.0
Two toes	12	.8
Both feet	2	.1
One hand and one finger	2	.1
One hand and one foot	1	.1
Both eyes	1	.1
One finger on one hand, and one on the other	1	.1
One finger on one hand, and two on the other	1	.1
Two arms and two legs	1	.1
One hand and one toe	1	.1
	1,517	100.0

Types of Injuries	1932 Number of Cases	Per cent of Total
One or more fingers, one phalange	516	66.7
One eye	68	8.8
Two or more fingers, two or more phalanges	50	6.5
Right or major index finger, two or more phalanges	36	4.8
Right or major thumb, one phalange	23	3.0
One toe	12	1.5
Right or major thumb, two or more phalanges	12	1.5
One foot or leg	11	1.4
Left or minor hand or arm	10	1.3
Two or more toes	6	.8
Right or major hand or arm	6	.8
Right or major index finger, at second joint, and one or more fingers	6	.8
Right or major thumb at first joint and right or major index at second	4	.5
Right or major thumb and index finger, two or more phalanges	3	.4
Right or major thumb at first joint and one or more fingers	3	.4
Two or more fingers or thumbs on both hands	2	.2
Right or major thumb at second joint and one or more fingers	2	.2
One hand or arm and one finger or thumb	1	.1
Both feet or legs	1	.1
Both hands or arms	1	.1
Totals	773	100.0

Building Operations

During the year 579 orders were complied with for safeguarding employment on buildings. The safety protection thus afforded included the equipping of working platforms with toeboards and guard rails, the installation of safety devices in connection with the use of electricity of dangerous voltages, protection to employees working below stagings or around floor openings, regulations to control smoke and fumes where artificial light was used, piping of salamanders in order to exhaust smoke and fumes to the outside air. Stagings used in the painting of buildings were examined regularly. Safety provisions included tielines secured to a stable part of the building or structure when the staging was attached to or supported by the gutters, and life lines and belts for men employed fifty feet or more above the ground, the prevention of overcrowding of stagings and the proper spacing of falls. Because of the falling off in the erection of new buildings, the number of orders issued does not equal those in former years. Much of the work of the building inspectors is concentrated now on repairs and alterations to existing buildings.

The building trades industry contributed 4,911 cases, or 11.7% of all industrial accidents for the year ending June 30, 1932: 15 of these cases were fatal, or 6.8% of all fatal cases. There were 67 permanent partial disability injuries, or 7.8% of

all cases of this type. There were two cases of total disability, or 28.5% of all such cases. During the year ending November 30, 1933, 116 accidents in the building trades were investigated, including 27 fatal accidents. The following table summarizes these accidents:

Type of Employment

Painting	42
Road building	30
Building construction	21
Roofing	10
Alteration and repair	12
Building wrecking	1
Total	116

Nature of Injury		*Causation*	
Fractures and breaks	55	Loss of balance	30
Bruises and contusions	25	Collapse of staging	26
Internal injuries	17	Trench cave-in	11
Amputations	5	Slipping of ladders	9
Lacerations	5	Broken ladders	9
Sprains and strains	4	Struck by falling objects	8
Infections from cuts	2	Broken gutters	3
Crushed to death	1	Faulty scaffolds	3
Burns	1	Falls through openings	2
Electrocution	1	All other	15
Total	116	Total	116

General Accidents

There were 805 accidents investigated by inspectors outside the building trades — 717 males and 88 females were included; 65 of these accidents were fatal; 60 of the total occurred to minors under eighteen years of age. Following are tables of the industrial accidents investigated during the year ending November 30, 1933, by industry, age and sex:

Industrial Accidents Investigated During Year Ending November 30, 1933, by Industry, Age and Sex:

Type of Employment	Total	M.	F.	−14 M.	−14 F.	15–17 M.	15–17 F.	18–20 M.	18–20 F.	21–30 M.	21–30 F.	31–40 M.	31–40 F.	41–50 M.	41–50 F.	51–60 M.	51–60 F.	61– M.	61– F.	Fatal M.	Fatal F.
Textiles	148	133	15	–	–	6	1	9	1	32	6	31	3	22	2	21	2	12	–	2	–
Shoes and shoe findings	69	49	20	–	–	9	4	8	4	11	7	10	4	3	1	4	–	4	–	1	1
Foundries	64	61	3	–	–	–	–	3	3	14	–	19	–	9	–	12	–	4	–	2	–
Paper and paper products	64	56	8	–	–	–	–	5	2	17	4	17	–	11	–	5	2	1	–	4	–
Metal trades	56	46	10	–	–	1	3	2	1	18	6	8	–	13	–	3	–	1	–	4	–
Furniture and wood products	56	54	2	–	–	3	2	2	–	13	–	11	–	16	–	8	–	1	–	5	–
Food products	54	49	5	–	–	1	2	5	1	6	1	16	–	12	–	5	1	4	–	5	–
Tanneries	34	32	2	–	–	2	–	3	1	9	–	12	1	3	–	3	–	–	–	–	–
Printing and publishing	30	30	–	1	–	3	–	4	–	10	–	4	–	4	–	1	–	3	–	1	–
Electrical	27	26	1	–	–	–	1	2	–	8	–	6	–	8	–	2	–	–	–	6	–
Mercantile	27	24	3	–	–	6	–	2	1	5	–	4	2	5	–	1	–	1	–	7	1
Rubber goods	23	18	5	–	–	–	1	1	–	7	2	4	2	6	–	–	–	–	–	1	–
Fuel	15	15	–	–	–	–	–	1	–	3	–	5	–	3	–	2	–	1	–	4	–
Jewelry and clocks	14	14	–	–	–	–	–	3	–	2	–	3	–	2	–	3	–	1	–	–	–
Toys and games	14	13	1	–	–	2	–	4	1	5	–	1	–	1	–	–	–	–	–	1	–
Clothing	13	6	7	–	–	1	4	2	1	–	1	1	1	1	–	1	–	–	–	–	–
Public utilities	11	11	–	–	–	–	–	–	–	2	–	3	–	2	–	2	–	2	–	6	–
Chemicals	9	9	–	–	–	–	–	–	–	3	–	2	–	1	–	2	–	1	–	–	–
Auto parts	5	5	–	–	–	–	–	2	–	1	–	1	–	–	–	1	–	–	–	–	–
Radios and parts	5	5	–	–	–	–	–	1	–	1	–	2	–	1	–	–	–	–	–	1	–
Laundries	5	5	–	–	–	–	–	–	–	1	–	2	–	1	–	–	–	1	–	–	–
Optical goods	5	5	–	–	–	1	–	1	–	1	–	1	–	1	–	–	–	–	–	–	–
Boat building	4	4	–	–	–	–	–	–	–	–	–	–	–	1	–	3	–	–	–	–	–
Pyroxylin	4	4	–	–	–	–	–	1	–	–	–	1	–	–	–	2	–	–	–	1	1
Miscellaneous	49	43	6	–	–	2	3	3	–	14	2	7	–	8	–	6	–	3	–	11	–
Totals	805	717	88	1	–	37	21	64	16	183	29	171	14	134	3	87	5	40	–	63	2

Industrial Accidents Investigated During Year Ending November 30, 1933, by Industry, Age and Sex — Continued

Nature of Injury	Total	Non-Fatal	Fatal
Abrasions, bruises and contusions	243	236	7
Amputations	243	242	1
Cuts, punctures and lacerations	136	134	2
Fractures and breaks	92	77	15
Burns and scalds	34	26	8
Sprains and strains	14	14	–
Electric shock and electrocution	10	1	9
Infection from cuts	10	7	3
Fatal elevator falls	9	–	9
Crushed to death	6	–	6
Internal injuries	6	2	4
Concussion	1	1	–
Suffocation, by steam	1	–	1
Totals	805	740	65

Employees sustaining these injuries worked at the following occupations:

Textile Mills: Weavers, dyers, warper tenders, back tenders, card tenders, spinners, extractor operator and loom workers, back tenders and winders.

Shoe Factories: Press operators, stitchers, packers, heelers, sole leather cutters, heel shavers and in the fleshing of soles.

Foundries: Erectors, punch press operators, millwrights, machinists, ironworkers, lathe hands and moulders.

Paper Mills: Press feeders, paper creasers, machine operators, helpers on machines, beater helpers and millwrights.

Furniture Factories: Planer operators, machine operators, mill workers, sawyers, gluers, operator of circular saw and cabinet makers.

Food Manufacturing: Machine feeders, bakers, doughmixers, meat cutters and wrappers.

Tanneries: Embossers, skin fleshers, sinkers, seasoners and beamhouse workers.

Printing and Publishing: Pressmen, printers, stereotypers, job press feeders.

Miscellaneous: Laborers, machinists, cutters, trimmers, chemists, machinists, engineers, linemen, carpenters and assemblers.

Contact with machinery caused 718 of the 805 accidents. In plants where accidents occurred, 609 had machinery that was safeguarded; 50 had safety committees. Medical kits were provided in 286 establishments; 459 firms maintained first aid rooms, and of this number 146 had full-time nurses or attendants, and 184 had visiting physicians or doctors on call.

Eye Injuries

There were 65 eye injuries to 64 men and one woman investigated during the year. A tabular summary of such accidents follows:

Type of Employment	
Machinery and parts	15
Textiles	13
Tap and die manufacturing	6
Metal trades	5
Construction	4
Automobiles and parts	4
Electrical manufacturing	3
Shoe manufacturing	2
Gas manufacturing	2
Optical goods	2
Fertilizer manufacturing	2
Paper manufacturing	2
Miscellaneous	5
Total	65

Eye Injuries — Continued

Nature of Injury	
Foreign bodies	28
Irritation	14
Cuts, punctures and lacerations	10
Bruises	4
Burns	4
Loss of sight	3
Loss of eye	2
Total	65

These eye injuries were caused by emery, steel and wood chips that break off from grinding wheels, saws and machines; spatterings from acids and caustic solutions, and the glare from welding operations. The following are typical cases:

A man was pushing blocks into a kettle of molten iron and some of the iron splashed into his eyes.

While grinding a piece of metal a chip entered a man's eye necessitating the removal of his eyeball.

While working near a man who was doing electric welding a man's eyes were affected by the ray from the electric arc.

A man was working near another man who was ladling acetic acid, and some of the acid splashed into his eyes.

While sharpening a tool emery entered a man's eyes.

Non-Machinery Accidents

Falls of persons and stepping on or striking against objects caused more accidents during the year than contact with machinery parts. The handling of objects and tools caused more industrial injuries than either falls or machinery accidents. These facts are well known to the inspectors who continually advise against conditions responsible for the origin of such accidents. Only through concerted effort of employees and management under intelligent direction will non-machinery accidents be reduced. Recommendations by inspectors in this connection include instructions for the careful handling and storing of raw material and preventing the overcrowding of employees in work places. The number of tabulatable injuries arising from non-machinery accidents and the extent of the disability which they caused appears from the following table:

*Total Tabulatable Injuries by Cause of Injury and Extent of Disability**

Cause of Injury	Totals	Deaths	Permanent Total Disabilities	Permanent Partial Disabilities	Temporary Total Disabilities
Handling of objects	12,842	23	1	162	12,656
Falls of persons	7,368	37	1	49	7,281
Machinery	4,885	35	1	474	4,375
Hand tools	3,800	1	1	63	3,735
Vehicles	3,100	49	2	28	3,021
Stepping on or striking against objects	3,076	6	–	16	3,054
Falling objects, not being handled by employee	2,061	9	–	18	2,034
Miscellaneous causes	2,030	15	–	21	1,994
Explosions, electricity, etc.	1,705	32	1	12	1,660
Occupational diseases	954	13	–	20	921
Animals	246	2	–	1	943
Totals	42,067	222	7	854	40,974

*Taken from Table 10 of the Annual Report of the Department of Industrial Accidents for the year ending June 30, 1932.

Injuries to Employed Children

Practically all the serious industrial accidents sustained by children were investigated. These included all fatal and permanently disabling injuries to children aged fourteen to eighteen as reported to the Industrial Accident Department for the year ending June 30, 1932. The certificating requirements of the children were checked up and found to be in compliance with the law with one exception.

Fatal Injuries to Children for the Year 1933

During this period no child under sixteen years of age sustained an accident arising out of and in the course of his employment which resulted fatally. One boy seventeen years of age is listed in the accident experience of the Industrial Accident Department for this year as a fatal case. He was employed for seven months as an attendant nurse in the tuberculosis ward of the Medfield State Hospital, and in the summer of 1931 showed signs of general weakness and pulmonary disorder. He was then removed to the Norfolk County Tuberculosis Sanitarium where the doctor in charge diagnosed the case as tuberculosis directly traceable, in his opinion, to the employee's occupation.

Permanent Partial Disability Injuries to Children Fourteen and Fifteen Years of Age

Three children under sixteen years of age received permanent partial disability injuries. Classified by industries and injury these were as follows:

Industry		*Injury*	
Mercantile	2	Loss of one phalange, one finger	2
Shoe and leather	1	Loss of two phalanges, one finger	1
	3		3

Two of these injuries occurred on meat-grinding machinery in mercantile establishments:

In one case the boy placed his right hand in the throat of the machine in attempting to force out the meat which had lodged there. His second finger on the right hand was caught in the mechanism when it began to operate, resulting in amputation of the second phalange.

In the other case, the boy was cleaning the meat grinder with his fingers of the right hand in the hopper, when he accidentally turned on the switch, starting the grinder. He lost the first digit of the middle finger.

While operating an embossing machine, the third boy sustained an injury to the index finger of the right hand, requiring amputation at the first joint.

One of these children was permitted to work without an employment certificate, and prosecution took place.

Permanent Partial Disability Injuries to Children Sixteen and Seventeen Years of Age

Twelve children sixteen and seventeen years of age, ten boys and two girls, sustained permanent partial disability injuries during the year, as set forth in the following table:

Type of Employment		*Nature of Injury*	
Shoe and leather	3	Loss of all fingers on both hands	1
Textile	2	Loss of use of one hand	1
Bottling	2	Loss of two phalanges, one finger, and one phalange, one finger	1
Paper Box manufacturing	1	Loss of two phalanges, one finger	1
Woodworking	1	Loss of one finger	2
Restaurant	1	Loss of use of one finger	1
Rubber	1	Loss of one phalange, one finger	5
Auto accessory manufacturing	1		
Total	12	Total	12

The causes of these accidents are described below:

A boy seventeen years of age employed in a shoe factory at cutting inner soles, lost all the fingers of both hands when he tried to lift the die out of the block in which it was stuck and accidentally stepped on the treadle, bringing the head of the machine down on both hands.

Another boy attempted to take material out of a press, stepping on the foot treadle before his hand was entirely out of the danger zone. He lost two phlanges on the middle, ring and little fingers.

Employed as helper on a calender, another boy of the same age was cleaning the rolls, when his left hand was crushed as the machine accidentally started up, resulting in the loss of use of his left hand.

In the other cases, two employed as delivery boys sustained amputation of phlanges: One lost his right index finger in cleaning a machine while it was in motion; another had his finger caught in paper box machinery.

Two boys, each sixteen years of age, sustained traumatic amputation through putting their fingers into the hopper of a meat-cutting machine and pressing the meat down on the grinding mechanism. One lost three phalanges, one on the index finger and the others on the third and fourth fingers. In the other case the boy had the ring finger amputated at the first joint.

An apprentice on wood-working machinery was about to saw a small piece of wood when his hand slipped and became caught under the saw, cutting the left index finger so severely that amputation was necessary.

Nearly all of these injuries were preventable. These children were not found to be illegally employed.

Injuries sustained by the two girls, who were seventeen years of age, involved amputation of a phalange in each case. In one, the girl was cleaning her machine in a wool-combing establishment, and in some way the cloth became entangled in the gears. In trying to remove it, her middle right finger was amputated at the first joint.

In the other case, while operating a perforating machine in the cutting room of a shoe factory, the material became caught while trying to straighten it out, and the girl's finger became drawn into the mechanism causing amputation at the first joint.

Free Egress from Factory Buildings

To maintain free egress from factory buildings, regular inspection is necessary. This problem is particularly acute in small establishments located in tenant factory buildings. It was necessary to issue 137 orders because doors were locked, bolted or otherwise fastened in violation of the law. Close attention was given to this problem in establishments where inflammable compounds or explosives were used and processes carried on that might obstruct or render dangerous the egress of operatives in case of fire. In some of these places barrels, boxes, refuse cans and containers were found stored temporarily in front of the exits and were removed by order of the Department.

Processes of industry in which gasoline, benzine, ether, naphtha, turpentine and benzol were used, including establishments engaged in the business of dry cleansing, engraving, rubber compounding and commercial photography, were carefully inspected. The requiring of closed containers and the substitution of less inflammable and non-explosive compounds were urged in some instances as precaution against explosion and fire in factory buildings.

Light in Industrial Establishments

There were 268 orders issued requiring compliance with the provisions of the Lighting Code. These involved protection of employees from glare, proper shading of lamps, better distribution of light, increased intensity of illumination at the work place, and suitable entrance and exit lighting. These orders were generally concerned with the maintenance of existing equipment. The system of lighting in many cases was found defective because of the accumulation of dust and dirt on the lamps. Regular cleaning of the equipment was urged in these instances. In some cases it was found necessary to change the location of the light source in order to remove discomfort and annoyance. Polished surfaces in certain establishments caused eye fatigue and interference with vision. Proper shading of lamps was required in order to deal with this condition. It was found in some cases that shades had been removed and replaced in such a manner as to impair the lighting.

Suitable illumination of exits, passageways, stairways, hallways, elevator cars, wash and toilet rooms and other parts of the plant was ordered in numerous instances. To establish a good distribution of light in the workroom, advice was given with regard to the height and location of lamps and the use of shades and reflectors. Close attention to lighting facilities in basements or mercantile establishments was continued during the year. Prompt compliance with the orders issued was received by the Department.

Ventilation

Industrial processes which generate toxic fumes and gases required the issuance of 354 orders which were promptly complied with. Systems for dust and fume removal in manufacturing and mechanical establishments, and work places in which industrial poisons were used, were given careful inspection. Inspectors were obliged to supervise closely ventilating systems in order to determine their efficiency and to give careful study to duct openings and the shape of hoods. Some equipment was found operating without adequate hood coverage and enclosure at the seat of the dust origin. The removal of dust was found in some cases to be prevented because of the hoods being blocked up with refuse material. Establishments inspected in this connection included shoe factories, foundries, woodworking plants and those manufacturing rubber products, also metal-plating concerns and concerns making rayon and asbestos fabrics. Conditions in plants in which steam and vapor caused uncomfortable conditions in the workroom were rectified. Special attention was given to ventilation in metal-polishing establishments, laundries, hotel kitchens and jewelry factories. Exhaust equipment was improved in places operating emery, grinding, polishing and buffing wheels, and wood-working shops in which lead and arsenic were used in the work process. Foundry operations in which smoke, gases, and silica dust constitute a health hazard were given careful consideration.

There were 840 orders issued by the Department requiring compliance with the first aid provisions of the statutes and the Department's rules and regulations. Failure to furnish basins, hot water, suitable chairs, blankets, and the replenishing of medical chests, was responsible for the issuance of orders. Persons other than a qualified nurse, employed in giving first aid treatment, were required to furnish certification from a doctor that they were competent to do this work.

Injuries resulting from infection continued to be a frequent cause for incapacity and partial disability. In 1932 there was a total of 4,104 injuries of this type: 21 terminated fatally; 37 were permanent partial disabilities. The Department of Industrial Accidents, in its Table 9 for the year ending June 30, 1932 which is presented herewith, indicates its experience with infections resulting from industrial injuries.

Infection by Nature of Injury and Extent of Disability, 1932

Nature of Injury	Totals	Deaths	Permanent Total Disabilities	Permanent Partial Disabilities	Temporary Total Disabilities
Cuts, punctures, lacerations	2,749	11	–	1	2,737
All other	539	1	–	–	538
Abrasions, bruises, contusions	657	5	–	–	652
Burns and scalds	112	–	–	–	112
Amputations, loss of use	36	1	1	34	–
Fractures	10	3	–	2	5
Sprains and strains	1	–	–	–	1
Totals	4,104	21	1	37	4,045

In 1932, the most recent period available for dependable statistics in this connection, it is indicated that 9.7% of the total tabulatable injuries were infection cases.

Industrial Health

The tangible result of the enforcement of the industrial health requirements of the statute was compliance with 3,963 orders issued by the Department. A total of 2,039 orders to provide suitable toilet and washing facilities was issued. These included the requirement to furnish running hot and cold water in establishments where employees were exposed to contact with poisonous substances or liquids.

Special attention was given by inspectors to plants where industrial poisons were used, such as those engaged in the manufacture of textile fabrics, refrigerators, storage batteries, brake linings, rubber products, shoes and findings, including wood heels, naphtha cement and dyeing and cleansing establishments. Means required to protect the health of employees and to prevent the inhalation of dust, fumes and gases included mechanical exhaust at the point of origin, the use of suitable containers, respirators, rubber gloves and masks, and other devices. Co-operation was received from physicians, hospitals and clinics in reporting patients suffering from diseases of occupation. The information received in this connection was filed each month with the Department of Public Health as required by Section 11, Chapter 149 of the General Laws, Ter. Ed.

Occupational Diseases

During the year 352 cases of industrial disease were investigated. These included 298 men and 54 women, 20 of which cases were fatal. In each instance the work place was investigated, and, when necessary, recommendations were made for the control of the danger. Co-operation was generally received under these conditions. By disease, age and sex the industrial diseases investigated are classified as follows:

Cases of Industrial Illness Investigated During the Year Ending November 30, 1933, by Disease, Age and Sex

Illness	Total Cases	15–18 M.	15–18 F.	18–20 M.	18–20 F.	21–30 M.	21–30 F.	31–40 M.	31–40 F.	41–50 M.	41–50 F.	51–60 M.	51–60 F.	61+ M.	61+ F.	Total M.	Total F.	Fatal M.	Fatal F.
Dermatitis	249	2	4	13	11	58	24	54	7	41	5	20	–	10	–	198	51	–	–
Gas and fume posioning	34	–	1	–	–	8	–	12	–	7	–	3	–	3	–	33	1	2	–
Lead posioning	20	–	–	–	1	3	–	7	–	4	–	4	–	1	–	19	1	–	–
Pneumoconiosis	25	–	–	–	–	3	–	2	–	5	–	14	–	1	–	25	–	10	–
Silicosis	8	–	–	–	–	2	–	1	–	3	–	1	–	1	–	8	–	4	–
Asbestosis	3	–	–	–	–	–	–	2	–	1	–	–	–	–	–	3	–	2	–
Anthrax	8	–	–	–	–	2	1	3	–	2	–	–	–	–	–	7	1	1	–
Benzol poisoning	2	–	–	–	–	1	–	1	–	–	–	–	–	–	–	2	–	1	–
Compressed air illness	2	–	–	–	–	1	–	–	–	1	–	–	–	–	–	2	–	–	–
Brass posioning	1	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–
Totals	352	2	5	13	12	78	25	82	7	65	5	42	–	16	–	298	54	20	–

Employees covered by the above table worked at the following occupations:

Textile Mills: Skein winders; washer tenders; weavers; helpers on printing machines and at dye kettles; wool scourers and can boys.
Shoemaking: Shoedressers; cementers; heel coverers; treers and ironers.
Tanneries: Beamhouse workers; tanners; finishers; sprayers and wet wheelers.
Rubber Factories: Lasters; calender operators; trimmers and finishers.
Metal Trades: Solderer; dyesetter; packer and machine operator.

The origin of these diseases was traced to the following sources:

Tanneries: Chrome solution and dyes.
Shoemaking: The use of shellac, wood alcohol, ammonia and dyes.
Textile Mills: In handling of dyed materials and oily rags; cleaning color cans.
Rubber Factories: Naphtha, gasoline and varnish.
Metal Trades: Acid and alkali solutions and oils.

To prevent recurrence of similar diseases of occupation, improvement was made in the exhaust system in many cases. Better ventilation was provided in workrooms and suitable washing facilities made available. The installation of shower baths and provision for lockers, medical chests, first aid rooms, respirators, goggles, masks, wooden shoes, rubber aprons, rubber gloves, oil skin sleeves, canvas shoes and aprons, and suitable places for eating food were among the means adopted to prevent recurrence of disease.

Dermatitis

There were 249 cases of dermatitis investigated, affecting 198 men and 51 women. The following table gives these cases by industry, age and sex:

Dermatitis Cases Investigated During the Year Ending November 30, 1933, by Industry, Age and Sex

Industry	Total Cases	15–17 M.	15–17 F.	18–20 M.	18–20 F.	21–30 M.	21–30 F.	31–40 M.	31–40 F.	41–50 M.	41–50 F.	51–60 M.	51–60 F.	61+ M.	61+ F.	Total M.	Total F.
Textile	51	–	–	4	–	14	1	12	1	9	–	8	–	2	–	49	2
Shoe manufacturing	49	2	2	–	3	11	7	11	1	7	1	4	–	–	–	35	14
Tanners	47	–	1	3	1	12	2	12	2	11	–	3	–	–	–	41	6
Rubber goods	14	–	1	1	1	–	2	3	2	2	2	–	–	–	–	6	8
Machinery and parts	13	–	–	–	1	2	4	2	1	1	–	–	–	2	–	7	6
Food	9	–	–	1	1	2	1	2	–	1	1	–	–	–	–	6	3
Electrical specialties	6	–	–	–	1	–	2	–	–	2	1	–	–	–	–	2	4
Gas and oil	6	–	–	1	–	4	–	1	–	–	–	–	–	–	–	6	–
Metal trades	6	–	–	–	1	–	–	2	–	–	–	1	–	2	–	5	1
Hardware	5	–	–	–	–	1	1	–	–	1	–	1	–	1	–	4	1
Paper and paper products	5	–	–	–	–	1	–	3	–	–	–	–	–	1	–	5	–
Chemical manufacturing	4	–	–	–	–	2	–	2	–	–	–	–	–	–	–	4	–
Cleansing and dyeing	4	–	–	2	–	1	1	–	–	–	–	–	–	–	–	3	1
Foundry	4	–	–	–	–	–	1	1	–	2	–	–	–	–	–	3	1
Printing and publishing	4	–	–	–	1	–	–	1	–	1	–	1	–	–	–	3	1
Sporting goods and games	4	–	–	–	–	2	–	1	–	1	–	–	–	–	–	4	–
Leather Products	3	–	–	–	–	1	1	–	–	1	–	–	–	–	–	2	1
All other	15	–	–	1	1	5	1	1	–	2	–	2	–	2	–	13	2
Total	249	2	4	13	11	58	24	54	7	41	5	20	–	10	–	198	51

Employees suffering from this illness were employed at the following operations:

Textiles: Washer tender; weaver; color boy; dye bath tender; kettle hand; wet finisher; spinner and printer.

Shoe manufacturing: Treer; ironer; stitcher; cementer; laster and shoe dressing.

Tanneries: Seasoner; enameler; tan room helper; wet-wheeler; lumper; glazer; beam house worker.

Rubber products: Calender operator; weighing, cutting and trimming rubber.

Machinery: Solderer; welder; assembler and grinder.

Establishments manufacturing or serving food: Baker; dishwasher and chocolate dipper.

Miscellaneous: Paster; punch press operator; painter; polisher; driller and plater; lithographer; moulder and mechanic.

The causation of disease was traced to the following conditions:

Textiles: Contact with dyes, caustic solutions, oils, alkali and acid solutions.

Shoe manufacturing: Handling shoe dressings, inks and cleansers.

Tanneries: Handling wet chromed leather and also seasoning solutions.

In other industries causative agents included oils, acid and alkali solutions, lacquer, turpentine and colored inks. Employees in places were advised to wash hands and forearms frequently with a mild soap and water where irritating substances were used. Where ammonia, naphtha and gasoline were used in the course of employment, employees were advised to wash their hands carefully and apply olive oil or cold cream at the end of the day.

Gas and Fume Poisoning

There were 34 cases of gas and fume poisoning investigated, involving 33 men and one woman. Of these, two were fatal. The following table summarizes these cases by age, sex and industry:

Gas and Fume Poisoning Cases Investigated During the Year Ending November 30, 1933, by Industry, Age and Sex

Industry	Total Cases	16–18 M.	16–18 F.	18–20 M.	18–20 F.	21–30 M.	21–30 F.	31–40 M.	31–40 F.	41–50 M.	41–50 F.	51–60 M.	51–60 F.	61+ M.	61+ F.	Total M.	Total F.
Textile	6	–	–	–	–	1	–	3	–	–	–	–	–	2	–	–	–
Pyroxylin products	5	–	1	–	–	–	–	1	–	2	–	1	–	–	–	–	–
Auto sales and service	5	–	–	–	–	3	–	2	–	–	–	–	–	–	–	–	–
Metal plating	3	–	–	–	–	–	–	2	–	–	–	1	–	–	–	–	–
Lime manufacturing	2	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–
Musical instruments	2	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Leather manufacturing	2	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–
All other	9	–	–	–	–	3	–	2	–	2	–	1	–	1	–	2	–
Totals	34	–	1	–	–	8	–	12	–	7	–	3	–	3	–	2	–

Lead Poisoning

There were 20 cases of lead poisoning investigated, involving 19 men and one woman. None of these was fatal. The young woman affected by this disease handled enameled articles after they were taken from the ovens. Seven men were employed using paint. They were either painters or mixers of paint. Other men handled red lead and lead bushings or repaired old storage batteries. The following table summarizes these cases by industry, sex and age:

Lead Poisoning Cases Investigated During the Year Ending November 30, 1933, by Industry, Age and Sex

Industry	Total Cases	18–20 M. F.	21–30 M. F.	31–40 M. F.	41–50 M. F.	51–60 M. F.	61+ M. F.	Total M. F.
Painting	7	– –	2 –	2 –	1 –	1 –	1 –	7 –
Smelting metals	3	– –	– –	– –	1 –	2 –	– –	3 –
Battery manufacturing	3	– –	1 –	2 –	– –	– –	– –	3 –
Foundry	2	– 1	– –	1 –	– –	– –	– –	1 1
Machinery and parts	2	– –	– –	1 –	1 –	– –	– –	2 –
All others	3	– –	– –	1 –	1 –	1 –	– –	3 –
Totals	20	– 1	3 –	7 –	4 –	4 –	1 –	19 1

Pneumoconiosis

There were 25 cases of pneumoconiosis investigated during the year, of which 10 were fatal. Fourteen occurred in the granite trade and 7 resulted in death. The victims of this disease ranged in ages from fifty to sixty years and all were employed in granite cutting. Respirators were available for the use of these employees, but in many instances they were not used. All were exposed to the inhalation of granite dust. Two men were employed in foundries as sandblasters. Both of them worked in rooms apart from other workmen. They were equipped with air-flow helmets. Investigation showed that there was, neverthelsss, grave exposure to the inhalation of silica sand. Both died from this disease.

Inhaling dust from the use of dry rosin in the paper industry was found to be the cause of death to another employee.

In the 15 non-fatal cases, men were exposed to sand and granite dust, bronze powder and soot, and rabbit hair. In the establishments where these men worked, local and general exhaust ventilation were provided, but were obviously inadequate.

Silicosis

The Department investigated eight silicosis cases, four of which were fatal. In three of these, workmen were employed in the operation of sandblasting equipment and one in the granite industry. Two men employed in a stove foundry contracted this disease, and one employee who worked around a stone crusher became ill. X-rays showed the effect of silica dust in his lungs. Investigation of these cases indicated that the dust-removal equipment was badly worn out.

Asbestosis

Three cases of asbestosis were investigated in an establishment where brake linings were made, two proving fatal. These men were employed as mule spinners and exposed to a hazardous dust condition. A wetting-down process was introduced and a new exhaust system provided in order to reduce the hazard.

Industrial Anthrax Poisoning

There were eight cases of anthrax involving seven men and one woman reported to the Department as required by statute. Three establishments furnished two cases each. One case was fatal. All the men were employed in tanneries where raw skins were handled. In nearly every instance infection developed in an exposed cut or scratch.

The employee in the fatal case was a laborer in the beamhouse where he had worked for two and one-half years. He cut his lip while shaving. The cut became infected and the attending physician diagnosed his case as anthrax septicemia. In this plant employees are furnished with rubber gloves, rubber aprons and rubber

boots for protection against this disease. Adequate washing facilities were provided. Frequent inspection of the plant was made and sanitary conditions maintained in conformity with the requirements. The women employee was a wood heel worker. Her physician was of the opinion that anthrax was caused through contact with the leather heels which contained anthrax spores. Her incapacity for work continued for about ten weeks.

Benzol Poisoning

Two cases of benzol poisoning were investigated, one of them resulting fatally. In the fatal case the employee was a shoemaker employed in cementing soles. It is claimed that the cause of death was the inhalation of poisonous benzol fumes, although there were other disease complications and it was determined that benzol was used in very limited quantities at the place of employment.

Miscellaneous

Two cases of caisson disease were reported, affecting men employed in the construction of a tunnel. One case of brass poisoning was reported.

Home Work

During the year there were 259 licenses granted to make, alter, repair or finish wearing apparel in a room, apartment or dwelling house. Conferences were held with employers to determine why home work was given out. Generally it was stated that limited factory space encouraged the procedure which was chiefly resorted to during the peak season. These conditions seemed to be especially true of the making of men's neckties, and of embroidered articles. Welfare organizations encouraged the giving out of home work to individuals who were deriving their support from public funds. These organizations were helpful in obtaining compliance with the statute requiring the maintenance of sanitary conditions in the room or apartment in the dwelling house used for making or furnishing wearing apparel. Firms were also approached by these organizations in an effort to get them to provide regular employment for individuals doing home work, thus giving them a larger return for their labor.

Inspectors were required to make investigations in their different districts in order to ascertain to what extent out-of-state contractors for home work were doing business in Massachusetts. The reports made by the inspectors indicated that some years ago fancy articles of embroidery were made to some extent for out-of-state contractors, but it was the opinion of the inspectors that the depression the past four years has practically eliminated employment of this kind.

Persons hiring, employing or contracting with a member of a family to make or adapt for sale by labor performed in a room or apartment in a tenement or dwelling house, on articles other than wearing apparel, have been required to furnish to the Department the names and addresses of the workers so hired, employed or contracted with and of all women and minors dwelling in the same room or apartment and also the ages of girls under twenty-one and boys under eighteen. These requirements are pursuant to Section 147a, Chapter 149 of the General Laws. Each inspector made careful investigation among the establishments located in his district to ascertain the places where work of this kind was being done and also contacted with other sources of information for this purpose. The types of employment in which this home work is being carried on include the making of electrical parts and sockets, tags, shoe bows, women's leather bags, leather lacings in shoe uppers, leather novelties, base balls, greeting cards, handsewing, baby shoes, shoe buckles, shoe ornaments, cloth dolls, paper ornaments, elastic fabrics, paper products, artificial flowers, hand-braided rugs, jewelry, beading for shoes, cutting felt from shoe ornaments, curtains and draperies, celluloid toys and celluloid buckles and ornaments. In every case statutory obligations resting upon the employers with reference to hiring women and children were made known. The statutes regulating the employment of minors in or about or in connection with any factory, manufacturing or other type of industrial establishment was emphasized to them. In checking up possible illegal employment, homes were visited by inspectors in cases where children under eighteen years of age were members of the family. Much of the home work is done by elderly women.

Lockers for Employees

In establishments where the nature of the work rendered it necessary to make a complete change of clothing, separate lockers, closets or other receptacles were provided employees in compliance with seven orders issued for this purpose by the Department. These were installed in hotels, laundries, dyeing and cleansing establishments and tanneries.

Beauty Parlors and Hairdressing Establishments

At the direction of the Commissioner an investigation was made of beauty parlors and hairdressing establishments. Each inspector was required to report the employment conditions found therein throughout his district, together with the information as to sanitary requirements, hours of labors, toilet and washing facilities and compliance with the provisions of the various labor laws. There were 2,419 such establishments inspected, in which 2,611 persons were employed: 1,910 women and 701 men. It was found necessary to post new time notices in 303 of the shops. There were 141 minors between the ages of sixteen and twenty-one included in the group, 74 of whom were employed without educational certificates. Conditions were found to be out of harmony with the statutory requirements in 39 establishments, and orders were issued for correction in these cases. Special attention was given to ventilation and lighting facilities in these places.

Sanitary Survey of Wood Heel Manufacturing Establishments

The extensive use of methanol, wood alcohol and other industrial poisons in wood heel-covering shops suggested that a sanitary survey of the industry would be useful. There were 56 such places of employment visited and the usual sanitary inspection made in each. Information was secured as to the solvents and cements employed in the industrial processes, including nitrate cellulose as the body substance, and the use of acetone, butyl acetate, methyl or wood alcohol and denatured alcohol; the types of containers used and whether they were provided with covers; the exhaust ventilation provided, in general and at the source of origin of the fumes; the sickness record of employees for the year previous, toilet and washing facilities, and the addresses of concerns from whom material were purchased. These establishments are located in Boston, Malden, Chelsea, Lynn, Salem, Newburyport, Amesbury, Haverhill, Methuen, Lawrence and Lowell. There was a total of 534 men and 688 women found employed; also seven boys between the ages of fourteen and sixteen and five girls in the same age group. Certificates were on file for the children, and their employment places were free from dangerous conditions. There were 41 boys and 60 girls between the ages of sixteen and eighteen years employed, for whom certificates were on file.

In the shops, women and girls were employed in covering heels with either plain, fancy or celluloid covers. The first two operations consist of cutting and trimming the leather covers after they have been cemented on with a high-grade naphtha cement. As a general thing the cement containers used under these circumstances were provided with covers, thus preventing the unnecessary spreading of naphtha fumes in the workroom. In the room where the celluloid covers are applied, methanol or synthetic wood alcohol is used to soften the celluloid. This room in practically all of the establishments was set off, enclosed and isolated from the other factory space, usually provided with fire-proof doors, and a window or wall fan, depending on the size of the room, was used for general ventilation. When necessary, orders were issued to clean up shop premises, sinks and toilets; to provide suitable and adequate first aid facilities; to remove obstructions from passageways; to discontinue the use of the common drinking cup; and to clear rubbish from stairways in the tenant factory buildings.

Much attention was given to places where the process of spraying lacquer on wood heels was substituted for the covering with celluloid. Respirators were generally used by the employees and spray hoods were found to be connected to adequate exhausts. In some establishments improvement was ordered made in equipment for the removal of fumes.

The amount of occupational diseases found in these shops was comparatively slight, being limited to five cases of dermatitis.

Investigation of the Use of Benzol in the Shoe Industry

In connection with an inquiry into the use of benzol in the shoe industry, 145 shoe factories were visited, 61 of which had previous experience in the use of this industrial poison, while 11 were using it in the plant without knowledge of its dangerous properties and taking no precaution to protect employees from contact with its fumes. Benzol was used in cements and handled by 191 people: 186 women and five men. The amount of benzol used monthly by these concerns varied from one firm, using a single pint, to another using 100 gallons. It was found that three of the establishments inspected used 60 gallons in the same period; two, 50 gallons; one, 40 gallons. Fourteen of them used 15 to 35 gallons, while the others used less than 10 gallons. Substitutes found used in some of these places included latex and naphtha. In some of these plants cement was used in small open containers and applied with a brush. The benzol was used in connection with cementing crepe rubber soles on sport shoes and in cementing leather and rubber soles, also in cementing channels on outer soles. Fumes from benzol were found in 53 of the plants, and orders to install adequate local and general ventilation were issued.

Weekly Payment Law

The administration of this statute continues to be an instrument of great service to the working people of the State. Employees who have been victimized at the hands of unscrupulous persons come to the Department with their complaints for non-payment of wages and are given practical help in their trouble. After a personal interview with the complainant, the facts in each case are entered upon forms used for this purpose. Questions designed to establish the jurisdiction of the Department and to satisfy the requirements of the statute in case of prosecution are noted therein. The employer is then notified by correspondence of the amount due, and if payment is not made promptly, demand is made by the special investigator of the Division. If refusal or failure to comply with the requirements of the Weekly Payment Law takes place, action in court is brought by the Department. This procedure has proven successful to hundreds of men and women during the year without any expense to them. The experience of the Division indicates clearly that serious injury is imposed on his family when the laborer is defrauded of his wages. In 1933, 2,225 complaints were investigated. It was necessary to prosecute in 696 cases. The total amount paid by the employers after complaint was filed was $54,448.72. Small amounts were usually involved, making it unprofitable for the employee to seek legal assistance. Many claims arise from disputes over the wage rate. When conflicting statements are made by the parties, much of the special investigator's time is occupied in bringing about an agreement and preparing the way for compliance with the statute. This practice has proven satisfactory to all parties concerned.

An important feature of this work is giving advice to persons who are having difficulties with the trustee process or the assignment of wages law. When a complaint does not come within the jurisdiction of the criminal law, the employee is advised of the correct procedure in the recovery of the wages earned. The courts have become very familiar with the work done in these cases and frequently will require that the plaintiffs and the defendant have a conference at the Department with the representatives for the purpose of reaching an agreed statement of facts. This practice usually results in the case coming to an amicable settlement.

The branch offices, located in Fall River, Pittsfield, Lawrence, Worcester and Springfield, render this service to wage-earners who call for assistance in these matters. Public welfare organizations and other agencies continue to advise employees who have been victimized in failure to secure their wages to take advantage of the service given by this Department. Police departments and court officials generally follow the same procedure.

Law Enforcement

During the year ending November 30, 1933, the Department instituted 1,223 prosecutions as against 1,181 for the preceding year. The majority of the more serious prosecutions were for violations of the sections dealing with the employment

of women and minors. Here follows a tabulation of the complaints entered in court and of their disposition:

1,223 Prosecutions:

876 guilty; 61 not guilty; 236 dismissed; 50 defaults.

876 Guilty Cases consisted of the following violations:

504 Women and Minors Violations
357 Wage Complaints
8 Painting Rule Violations
1 Building Rule Violations
5 Public Works Violations (2 citizens' preference law violations, 3 veterans' preference law violations)
1 Illegal Advertising Violation

The penalties in the 876 Guilty Findings were as follows:

504 Women and Minors Violations:

On 34 counts 3 defendants were fined a total each of $100, for employing 23 women and minors overtime; employing 10 women and minors at time other than stated on the printed notice; and 1 locked door violation.

On 18 counts 1 defendant was fined a total of $75 for employing 9 women and minors overtime; employing 9 women and minors at time other than stated on the printed notice.

On 9 counts 1 defendant was fined $70 for failing to procure 3 certificates for minors; failing to post 3 time notices; employing 3 minors overtime.

On 8 counts 1 defendant was fined $60 for failing to procure 4 certificates for minors; employing 4 minors at time other than stated in printed notice.

On 159 counts 33 defendants were fined $50 each for the following violations:
86 counts employment of women and minors at time other than stated on printed notice.
47 counts overtime employment of women and minors.
13 counts failing to post time notices.
10 counts failing to procure certificates for minors.
1 count locked door violation.
1 count violation one day's rest in seven law.
1 count illegal public exhibition of minor.

On 4 counts 1 defendant was fined $25 for failing to procure 2 certificates for minors; overtime employment of 2 minors.

On 58 counts 14 defendants were fined $10 each for
21 counts failing to procure certificates for minors.
16 counts failing to post time notices.
6 counts employing minors after 10 p. m.
5 counts employment at time other than stated on the printed notice.
4 counts employing minors after 6 p. m.
3 counts overtime employment.
3 counts illegal employment of minors.

On 3 counts 1 defendant was fined $5.00 on each count for
1 count failing to provide medical chest.
1 count failing to provide shades for lights.
1 count violation of toilet rules.

On 33 counts 11 *defendants' cases were filed on payment of court costs:*
19 counts employment of women and minors at time other than stated on the printed notice.
11 counts overtime employment of women and minors.
1 count employment of minor before 6:30 a. m.
1 count employment of minor after 10 p. m.
1 count violation one day's rest in seven law.

On 3 counts 1 *defendant was fined $150 — suspended — placed on probation:*
2 counts overtime employment.
1 count failing to post time notice.

On 3 counts 1 *defendant was fined $100 — suspended — placed on probation.*
3 counts employing women at time other than stated on the printed notice.

On 4 counts 2 *defendants were fined $50 each — suspended — placed on probation:*
1 count failing to post time notice.
1 count failing to procure certificate for minor.
1 count employment at time other than stated on printed notice.
1 count overtime employment.

On 33 counts 9 *defendants' cases were placed on probation:*
20 counts employment at time other than stated on the printed notice.
5 counts overtime employment.
4 counts failing to procure certificates for minors.
2 counts employment of minors after 10 p. m.
1 count failing to post time notice.
1 count failing to give 45 minute lunch period.

On 135 counts 35 *defendants' cases were placed on file:*
59 counts employment of women and minors at time other than stated on printed notice.
28 counts overtime employment of women and minors.
18 counts failing to post time notice.
10 counts failing to procure certificates for minors.
5 counts employment of minors after 10 p. m.
5 counts failing to post Sunday Schedule.
4 counts employment of minors after 6 p. m.
3 counts violation of toilet rules.
2 counts violation of one day's rest in seven law.
1 count illegal employment of minor.

357 Wage Complaints:

On 11 counts 4 defendants were sentenced to House of Correction, terms 10 days to a month.
46 counts 8 defendants were sentenced to House of Correction, 2 weeks to 6 months-suspended-probation.
1 count 1 defendant was fined $50.
7 counts 1 defendant was fined $25.
1 count 1 defendant was fined $25, suspended for 3 months.
6 counts 5 defendants were fined $10 each.
7 counts 1 defendant's case filed on payment of court costs.
150 counts defendants' cases placed on probation, wages paid through the courts.

On 128 counts defendants cases placed on file, wages paid.

8 Painting Rules Violations:

On 2 counts 1 defendant was fined $25.
2 counts 1 defendant was fined $10.
4 counts 3 defendants' cases were filed.

1 Building Rules Violation:

On 1 count a defendant's case was filed.

3 Veterans' Preference Law Violations:

On 3 counts a defendant's case was filed.

2 Citizens' Preference Law Violations:

On 2 counts a defendant was fined $20.

1 Illegal Advertising violation: defendant's case filed.

For the year ending November 30, 1933. On *135* counts of violation of Labor Laws defendants *appealed* from lower court decisions, and the following dispositions resulted:

41 — *Counts: Violations Women and Minors Laws:*

Lower Court	*Superior Court*
On 8 counts a defendant was fined total of $400	Plea of Nolo accepted, fined $50
On 6 counts a defendant was fined total of 200	Fined $50 on 1 count; others filed
On 4 counts a defendant was fined total of 160	Found Not Guilty

Lower Court	*Superior Court*
On 7 counts a defendant was fined total of $100	Fined $50 on 1 count; others filed
On 2 counts a defendant was fined total of 60	Plea of Nolo accepted, fined $10
On 4 counts a defendant was fined total of 50	Plea of Nolo accepted, cases filed
On 9 counts a defendant was fined total of 50	Plea of Nolo accepted, cases filed
On 1 count a defendant was fined total of 25	Case filed

33 — *Counts: Violations Weekly payment law:*

Lower Court	*Superior Court*
On 6 counts a defendant sentenced 6 mos. H. of C.	Cases filed
On 3 counts a defendant sentenced 3 mos. H. of C.	Cases filed
On 1 count a defendant sentenced 1 mo. H. of C.	Case filed
On 1 count a defendant sentenced 1 mo. H. of C.	Case filed
On 4 counts a defendant was fined total of $100	Case continued generally — (Probation)
On 1 count a defendant was fined total of 50	Placed on probation
On 1 count a defendant was fined total of 50	Case filed
On 1 count a defendant was fined total of 50	Placed on probation
On 9 counts a defendant was fined $25 on each count	Defaulted
On 2 counts a defendant was fined 10 on each count	Nol Prossed
On 2 counts a defendant was placed on probation	Placed on Probation
On 2 counts a defendant was fined total of $20	Not Guilty

61 — Other counts: (19 women and minors — 42 wage complaints) have not as yet been reached or disposed of in the Superior Court.

For the year ending November 30, 1933, the Department assisted *766* persons in making application for hearings under the provisions of section 149, chapter 149 of the General Laws. This procedure generally takes place where the department finds after investigation of the matter that the three month period allowed for filing complaints with the court under section 148 of chapter 149 has elapsed.

After hearing the parties, the courts issued complaints in —

396 — cases and the following dispositions were made:

273 counts, defendants were found guilty:
215 were filed and placed on probation, wages having been paid.
50 counts, defendants fined from $10 to $100.
8 counts, defendants sentenced to House of Correction — on these appeals taken to Superior Court.
62 counts were dismissed, wages having been paid.
19 counts were dismissed, lack of prosecution.
34 counts defendants were defaulted.
8 counts defendants found not guilty.

After hearing the parties, the courts denied complaints in —

370 — cases, for the following reasons:

Where contracts, set-offs or disputes existed.
Where complaining parties failed to appear after being notified.
Where complainants were hired by deceased wife of the defendant.
Where civil action was pending between the parties.
Where complainants were stockholders in defendant corporation.
Where chart stated it was no collection agency.
Where amount due extended over too long a period (3 years).

876 Labor Law violations occurred in the following industries:

504 Women and Minors Violations:

269 occurred in manufacturing establishments.
146 occurred in mercantile establishments.
69 occurred in mechanical establishments.
18 occurred in workshops.
1 occurred in hotel.
1 occurred in theatre.

357 Violations Weekly Payment Law.

127 occurred among contractors (erection, alteration, repair buildings, structures).
72 occurred in manufacturing establishments.
67 occurred in mercantile establishments.
39 occurred in mechanical establishments.
14 occurred in express companies (transportation).
12 occurred in theatres.
11 occurred in bakeries.

9 occurred among musicians.
4 occurred in workshops.
2 occurred among janitors.
1 Illegal Advertising — manufacturing establishment.
14 Violations: Painting and building rules, veterans' and citizens' preference, contractors.

The sum of $54,448.72 was paid by employers after the Department had acted on the complaints of employees, from December 1, 1932, to November 30, 1933. During the bank holidays called by the Government in March, 1933, the Department suspended action in the taking of complaints where non-payment existed because of the holiday period.

The Department is encountering some difficulty in its attempts to enforce the labor laws. That is due, in a great measure, to a lack of uniformity of practice in the municipal and district courts in dealing with the violations. Some courts give to our laws the strictest and narrowest construction, on the ground that they are penal laws. They do not seem to take into account the decisions of our Supreme Court, which hold that statutes enacted to promote the moral and physical welfare of women and children in industry, although carrying a penalty for their violation, are not properly penal laws and should be construed broadly and liberally. The courts have also widely divergent views on the gravity of a particular violation, as, for instance, the duration of prohibited overtime employment, some judges holding that an overtime of fifteen or even thirty minutes is trivial and does not call for punishment, in spite of the fact that in Commonwealth vs. Riley, 210 Mass. 387, the violation was only of five minutes duration. In one typical case where the employer had required his women employees to work extra hours in taking his inventory, the judge declined to impose a penalty, and stated that, although there might have been a technical violation, the statute was not intended to punish in such cases. It appears to the legal officer of the Department that the word "technical" is very much abused. In section 57 of Chapter 149 of the General Laws it is provided in connection with cases where the Department is prosecuting that a person found guilty of violating the provisions of Section 56 "shall" be punished by a fine. Some judges hold this to be mandatory. Other judges (the greater number) hold that the punishment is altogether within their discretion.

> It may be apropos to quote here one of the dicta of our great Chief Justice Shaw: "Wherever laws, however wise, discriminating and salutary, through a defect in the administration of justice, should fail to inflict the proposed punishment upon the actually guilty, they would fail to command the respect and obedience of the subject, which is their sole object."

Public Works

Regular inspection was given to State projects for the construction of public works, including the building of roadways and the erection of schoolhouses, the construction of walls and bridges. The total appropriation of the Department of Public Works for this purpose in 1933 was $6,779,195.48. There was received from the United States Government the sum of $3,179,882.93 on Federal aided projects. The maximum number of men employed by contractors on highway contracts at any one time, not including regular State employees, was 5,022.

There was a total of 755 inspections of road construction work and a total of 83 orders issued to contractors. These included citizens' preference, 71; weekly payment of wages, three; 48-hour week, seven; prevailing rate of wages, two. Complaints alleging violations of law on public works were less numerous than in previous years. There was a total of 85 of these, classified as follows: Citizens' preference, 41; veterans' preference, 30; overtime employment, six; prevailing rate of wages, five; laborers' vacations, three.

In January, 1933, the Massachusetts Supreme Court ruled that the prevailing rate of wages provision included in Section 26 of Chapter 149, Tercentenary Edition of the General Laws, were unconstitutional. This result followed action taken by the Department in upholding the provisions of the statute requiring that the prevailing rate of wages be paid to journeymen carpenters employed on a public work project. In arriving at its decision which is given here in part, the court based its conclusions principally on certain United States decisions, notably the case of Connally vs. General Construction Company, 269, s. 385.

MASSACHUSETTS SUPREME COURT DECISION ON PREVAILING RATE OF WAGES

(January, 1933)

COMMONWEALTH vs. DANIEL O'CONNELL'S SONS

"RUGG, C. J. This is an indictment for violation of St. 1931, c. 377, amending the earlier statute and now found in General Laws, (Ter. Ed.) c. 149, s. 26. Trial by jury having been waived, the defendant was found guilty upon the first three counts. During the trial the question of the constitutionality of that part of the statute upon which the indictment was framed was raised by the defendant. That question was reported by the trial judge for our decision at the request of the defendant after conviction. G. L. (Ter. Ed.) c. 278, s. 30. Commonwealth vs. McCan, 277 Mass. 199.

"The agreed facts relevant to the question reported are in substance as follows: At the times alleged the defendant was engaged, under contract with the Commonwealth, in the construction of the Cheapside Bridge spanning the Deerfield River on the main road between Greenfield and Deerfield. The bridge was a public work. The defendant was a general contractor and had its office at the job on the Deerfield side of the bridge. Substantially all building contractors in the thickly populated section of the town of Greenfield immediately across the river from the Cheapside job office of the defendant were paying journeymen carpenters at the rate of $1 per hour for a day's wages. These journeymen carpenters were employed in the erection of a county building and private buildings other than bridges, there being no other bridge construction within the confines of Greenfield or Deerfield. The journeymen carpenters employed on the bridge were engaged principally in an inferior grade of carpentry known as form building. On the dates alleged in the indictment there was no sufficient amount of building going on in the town of Deerfield so that it could be determined what rate of wages was being paid to men doing the type of work that was being done at the bridge. The three men named in the first three counts, residents of Holyoke, were on the dates alleged duly qualified and listed as union journeymen. There was evidence tending to show that on the dates alleged these three men by reason of an arrangement, to which they consented and under which they continued to work, received wages at the rate of $.75 per hour.

"The only question presented for decision is the constitutionality of the statute. Its pertinent words are these: 'The wages for a day's work paid to mechanics and teamsters employed in the construction, addition to or alteration of public works' 'by the commonwealth, or by a county, town or district, or by persons contracting therewith for such construction, addition to and alteration of public works' 'shall not be less than the customary and prevailing rate of wages for a day's work in the same trade or occupation in the locality where such public works are under construction or being added to or altered. . . . Any person or contractor who knowingly and wilfully violates this section shall be punished by a fine or not more than one hundred dollars.' "

In the discussion the Court quoted extensively from the case of Connally *vs.* General Construction Company, 269 U. S. 385. A portion of the material so quoted follows:

"To construe the phrase 'current rate of wages' as meaning either the lowest rate or the highest rate or any intermediate rate or, if it were possible to determine the various factors to be considered, an average of all rates, would be as likely to defeat the purpose of the Legislature as to promote it. . . . In the second place, additional obscurity is imparted to the statute by the use of the qualifying word 'locality'. Who can say, with any degree of accuracy, what areas constitute the locality where a given piece of work is being done? Two men moving in any direction from the place of operations, would not be at all likely to agree upon the point where they had passed the boundary which separated the locality of that work from the next locality. . . . In other connections or under other conditions the term 'locality' might be

definite enough, but not so in a statute such as that under review imposing criminal penalties. Certainly, the expression 'near the place' leaves much to be desired in the way of a delimitation of boundaries; for it at once provokes the inquiry, 'how near?' And this element of uncertainty cannot here be put aside as of no consequence, for, as the rate of wages may vary . . . among different employers and according to the relative efficiency of the workmen, so it may vary in different sections. The result is that the application of the law depends not upon a word of fixed meaning in itself, or one made definite by statutory or judicial definition, or by the context or other legitimate aid to its construction, but upon the probably varying impressions of juries as to whether given areas are or are not to be included within particular localities. The constitutional guaranty of due process cannot be allowed to rest upon a support so equivocal. . . .

"The answer to the question reported is that the part G. L. (Ter. Ed.) c. 149, s. 26, set forth in the report violates the Fourteenth Amendment of the United States Constitution. The case is remanded for further proceedings not inconsistent with this opinion."

Since the year 1914, the prevailing rate of wages law in Massachusetts has been a subject of much discussion and controversy. In that year an amendment was made to the statutes of 1909 which required the regulation of wages for mechanics and laborers employed in the construction of public works by providing that such wages should not be less than the customary rate for a day's work in the same trade or occupation in the locality, city or town where such public works are constructed.

This amendment was advocated by its proponents on the ground that employment on public works would be reserved for citizens and that contractors knowing the prevailing rate of wages in the various localities could bid for these projects on the basis of competitive equality. It was believed that this provision would strengthen the existing preference statute and discourage the contractor in bringing alien labor into a community to compete for employment at cheaper rates with citizens of the Commonwealth.

In the past twenty years, nineteen different measures have been presented to the Massachusetts Legislature on this subject. It was decided by the General Court in 1932 of that year that an investigation should be made by the Department of Labor and Industries into the prevailing rate of wages to laborers, workmen and mechanics in the construction of public works. On December 5, 1932, the Commissioner filed a report including a recommended bill. This was printed as Senate Document No. 300. The bill provided that the prevailing rate of wages should be paid to laborers as well as mechanics on public works; that prior determination of wages to be paid should be made by the Department of Labor and Industries before the calling for bids on a public works contract.

Despite considerable public interest in these matters as evidenced by large attendance at the hearings on Senate No. 300 and other bills introduced on the subject, no legislation was passed this year. Massachusetts at the present time is without legislation providing for the control of wages on public works.

On highway projects, financed in whole or in part by the National Industrial Recovery Act, and Chapter 365 of the Acts of the Commonwealth of Massachusetts, there was co-operation with the Department of Public Works in supervising the hours of employment and the rates of wages for laborers and mechanics. On these projects men were hired to work for thirty hours a week except that time lost because of inclement weather or shutdowns could be made up during the succeeding week or weeks of any calendar month. It was under these conditions that forty hours a week were permitted in certain employments and much confusion existed among employers and workmen as to the operation of this rule. At the request of the parties concerned, appeal was made to the Bureau of Public Roads, United States Department of Agriculture, Washington, D. C., for an interpretation of these provisions. It was ruled that on any operations where men were employed on a forty-hour week basis, the contractor was required to present a certificate from the manager of the local employment agency to the effect that he is unable to furnish men in sufficient numbers to operate on a thirty-hour week basis. This ruling did much to eliminate confusion on this point.

New Duties Assigned by the Legislature of 1933

Chapter 64 provided for the maintenance of proper toilet facilities in industrial establishments by amending Section 133, Chapter 149 of the General Laws (Tercentenary Edition). It made possible prompt action in cases where sanitary conditions were found in bad condition. It repealed the old law which provided that no court action could be taken to require changes in toilet facilities without thirty days' notice in writing. The new law permits immediate prosecution at the discretion of the Department.

Chapter 193, an act further regulating the hours of labor of women and children in the manufacture of leather, amending Section 59, Chapter 149 of the General Laws (Ter. Ed.), by prohibiting the employment of women over twenty-one in the manufacturing of leather, after six o'clock in the evening.

Chapter 225 constituted an amendment to the One Day's Rest in Seven Law. The new statute provides that watchmen and firemen employed in manufacturing and mercantile establishments, where the boiler pressure capacity exceeds fifteen pounds, must be given twenty-four consecutive hours of rest in every seven consecutive days. This enactment met with compliance as its provisions were made known. It was proposed by the Department as the result of a study which it was directed to make by the Legislature.

Chapter 268 of the Acts of 1933 was intended to insure to piece and job workers in factories and workshops knowledge of their rates of compensation. This legislation was adopted as the result of numerous complaints in certain industries that employees working by the piece were not promptly acquainted with their rates of pay when working on new jobs, thus making possible manipulation of piece rates in a manner prejudicial to the workers' interests. This act became Section 157A, Chapter 149 of the General Laws (Ter. Ed.), and requires that employees paid by the piece shall be furnished promptly with the basis of remuneration for the operation they were employed to do. The fundamental purpose of the law is to have employees promptly informed as to the rate of pay they are to receive. This law became operative on September 16, 1933, and general co-operation is given to its compliance.

Chapter 324 of the Acts of 1933 was legislation proposed by the Department because of the difficulties experienced by the inspection force in controlling the use of benzol, particularly where this toxic substance appeared in compounds bearing simply trade names and not having on the container a chemical description of the contents. The new law enables the Department to safeguard the employee against exposure to benzol by providing that no person shall keep for sale, sell or transport or store, and that no person shall have for use in any manufacturing or mercantile establishment any material containing benzol in any receptacle, other than as part of a vehicle used exclusively for outdoor transportation, unless such receptacle is marked with one of these combinations of words and figures: "Contains less than 20% benzol"; "Contains 10% to 60% benzol"; "Contains more than 50% benzol"; indicating the proportion of benzol incorporated in the mixture as last compounded, and has the words "Beware of Poisonous Fumes."

Chapter 347 of the Acts of 1933 authorized the Commissioner of Labor and Industries to suspend the six o'clock law, so-called, relating to the hours of employment of women in the textile and leather industries during the operation of the codes for the regulation of the textile and leather industries adopted under the National Industrial Recovery Act. In accordance with the provisions of this statute, regulations have been made by the Commissioner, to which reference is made in his own report, relating to the employment of women after six o'clock in the evening in carpet and rug manufacturing, hosiery and knitwear, wool textiles, silk and rayon, cotton textiles and thread. Good co-operation with the requirements of these regulations has been received.

Chapter 351 of the Acts of 1933 became Section 20A of Chapter 149 of the General Laws (Ter. Ed.). The provisions of this new legislation concerned written or oral contracts between employers and employees in which the employee undertakes not to join or remain a member of a labor organization, the so-called "Yellow Dog" Contract. The new section means that no labor contracts of the type therein described shall afford a basis for the granting of court relief against anybody who has become a party to any undertaking or promise contained in such a contract.

It does not, however, prevent the entering into contracts by which either party undertakes or promises not to join or not to remain a member of a labor organization, and although finding a permanent place in Chapter 149 of the General Laws (Ter. Ed.), it is not a criminal statute. Its implications are concerned with Section 20, Chapter 149 of the General Laws (Ter. Ed.), which is a criminal statute and for this reason mentioned here. This became operative on October 22, 1933.

Resignations

During the year two inspectors resigned from the Division to fill important places in public service. On November 1, 1918, Inspector Joseph F. O'Brien began his work with the Department. On October 4, 1933, he was transferred to the Alcoholic Beverage Control Commission. His new duties included organizing the inspection work incidental to certain adjustments in the laws regulating the manufacture, transportation and sale of wines and malt beverages. In the Department of Labor and Industries he earned a reputation for efficient work and enjoyed the respect and appreciation of his associates.

Inspector William D. Collins began his career with the Department on February 17, 1919, and on December 21, 1932, was appointed by His Excellency Joseph B. Ely to the important position of Clerk of the Municipal Court of the City of Boston. Inspector Collins was faithful in the performance of his work and gave competent service to the Department.

Death of Inspector John P. Sullivan

On August 5, 1918, John P. Sullivan became officially connected with this Department and was attached to the Fall River office. On August 12, 1933, he died. Before becoming affiliated with the Department of Labor and Industries he had wide experience in police work and for a long period was connected with the fire department of the city of Fall River. He was with this Department for fifteen years and was always known as a courteous and friendly associate. In his home city he was looked upon by those who knew him well as a capable man, solicitous in doing the day's work and meeting his duties and obligations as a public-spirited citizen. His funeral was attended by a large concourse of people. Various civic organizations, fraternal groups, prominent clergymen and laity attended the obsequies. With his associates he left the memory of a kindly and friendly man.

REPORT OF THE DEPARTMENT'S OCCUPATIONAL HYGIENIST, MANFRED BOWDITCH

The work in occupational hygiene, inaugurated in April, 1932, was carried forward in 1933 along the lines set forth in the last annual report. Principal activities have been in connection with (1) the department's painting code, (2) the benzol labeling law, and (3) the legislative inquiry into the problem of dust diseases in the granite and foundry industries.

Painting Code. — The committee of master painters, journeymen and others at interest appointed to revise the department's painting code completed its work in August and the "Revised Rules, Regulations and Recommendations Pertaining to Structural Painting," adopted by the department on September 7, became effective November 1. Prepared for the committee's consideration by the occupational hygienist, the new code contains over 75% new material and represents in many respects radical departure from previous practice. Principal among these are (a) application of the rules not merely to those engaged in the painting business, but to "every person or firm employing one or more persons in the painting of structural property", (b) the requirement of annual registration with the department of all rigging used in such painting operations*, (c) the requirement that a "painter's rigger", examined and certificated by the department, be employed by every employer using rigging in painting operations*, (d) drastic restriction of the hazardous practice of swinging stages from the gutters of buildings, (e) the requirement of a safety factor of four in all devices for the support of persons, (f) the requirement of approval by the department of the design of stage beds, hangers, life belts,

*Privately owned rigging used in painting single residential property and rigging eight feet or less in height, not attached or suspended, are excepted.

trestle ladders, extension planks, extension roof boards, scaffold and ladder jacks and certain other types of supporting device, and (g) placing of responsibility on the employee for the use of protective devices supplied to him.

Although these regulations have been in force but a short time as this report is written, their value in the enforcement of proper safety and health standards is already apparent.

Benzol Labeling Law. — The effort to secure legislation requiring that benzol (coal tar benzene) and its compounds bear a poison warning label came to a successful close when "an act regulating the sale, distribution, storage and use of benzol and its compounds" was approved by Governor Ely on June 28. This act, comprising Sections 142 B, C, D, E and F of Chapter 149 of the General Laws, provides that every receptacle, other than part of a vehicle used exclusively for outdoor transportation, containing benzol or a benzol compound, shall be clearly and conspicuously so marked and shall bear the words, "BEWARE OF POISONOUS FUMES." The commissioner is authorized to make certain exemptions and to require reports of the manufacture, sale, use, etc., of benzol and benzol compounds.

General recognition of the need of such a law led to marked co-operation on the part of manufacturers and others in its preparation and passage. Although similar legislation has been sought elsewhere, it is believed that the Massachusetts benzol labeling law is unique in the United States.

Granite and Foundry Survey. — Reference was made in the last annual report to pressing need for a survey of the granite industry of the state with respect to dust conditions causing the incurable occupational disease known as "silicosis", which frequently paves the way for fatal tuberculosis. A ten-point program for the survey, on which a beginning was made in 1932, was outlined.

A series of events in the spring of 1933, including the widely publicized case of the Taunton molders, brought both the granite and foundry dust problems sharply to the legislative foreground and resulted in the establishment of a special commission, composed of the commissioner of labor and industries, the commissioner of public health, the chairman of the Department of Industrial Accidents, the commissioner of insurance and the attorney general, "to investigate and study the problem of diseases caused by dust in the granite and foundry industries, of protection from said diseases, and of compensation insurance in said industries and the problem of industrial disease compensation generally." While this action by the Legislature begot an investigation under broader auspices and of materially greater scope than the departmental study previously contemplated, the election of the commissioner of labor and industries as chairman and the appointment of the occupational hygienist as executive secretary to the investigating commission assured major participation by this department. The ten-point program above referred to was adopted as the basis for the commission's investigation and the results of the survey of granite establishments already completed were embodied in its findings.

The resolve establishing the Special Industrial Disease Commission was approved on July 12, the commission held its first meeting on July 13, and the occupational hygiene office of the department became the office of the commission for the remainder of the year. Because of the magnitude of the work undertaken, it was found necessary to defer the date for filing the commission's report from December 1, 1933, to February 1, 1934, and a complete summary of its activities can therefore not be given in this report. At the close of 1933, however, eight public hearings and 41 meetings and conferences had been held in Boston, Taunton, Worcester, Philadelphia, Washington, Buffalo, Rochester, Saranac Lake and New York City and fifteen granite and foundry establishments had been visited by the commission. Special inspection of the state's 314 granite establishments and 225 foundries had been completed, measurements of dust concentration made in selected plants, representative samples of foundry dusts petrographically analyzed, and important dust-producing processes photographed. Members of the staff of the Department of Public Health had physically examined and x-rayed 961, or 46 per cent, of the state's 2,100* granite workers and 1,614, or 24 per cent, of its 6,700* foundry employees, municipal vital statistics had been studied and pertinent data drawn

*Approximate figures.

from the records of the Department of Industrial Accidents. Correspondence with employers' and labor organizations and governmental officials in many states, as well as study of the literature on the subjects of the investigation, had brought to the office a wealth of material, including as this is written well over 200 articles and volumes dealing with the medical, legal, engineering, economic and administrative phases of the silicosis problem.

The above should suffice to make clear that little outside the scope of this investigation could be undertaken during the latter half of 1932. A summary of the commission's findings and their legislative results will find place in the next annual report.

It was said in the 1932 report that "the major difficulty with which the work in occupational hygiene has to contend is the elementary one of man-power." This still holds true. With a single individual in state employ devoting full time to this increasingly important subject, Massachusetts is outstripped 10 to 1 by Connecticut and 16 to 1 by New York, its two most important industrial neighbors.* However, the facts uncovered by the Special Industrial Disease Commission's investigation so clearly demonstrate the need of more adequate work in this field that failure on the part of the 1934 Legislature to establish in this Department a Division of Occupational Hygiene seems all but unthinkable.

The department's Occupational Health Council continues of great value as a source of individual advice and assistance in the many special problems with which we are confronted. Membership in the council now stands at 23, Dr. Henry D. Chadwick, who on September 30 succeeded Dr. George H. Bigelow as commissioner of public health, having consented to serve as a member of the group.

*Connecticut, Bureau of Occupational Diseases, 4 employees; New York, Division of Industrial Hygiene, 32 employees. Statistical Abstract of the U. S., 1933; industrial wage earners: Massachusetts 434,441, Connecticut 192,174, New York 848,352.

REPORT OF THE DIVISION OF STATISTICS

Roswell F. Phelps, *Director*

Introductory

The principal branches of the work of the Division of Statistics are the collection and publication of statistics of labor and manufactures and the answering of inquiries relative to industrial conditions in the Commonwealth. These several branches of the work of the Division during the year 1933 are discussed in this report.

The statistical data herein presented relate for the most part to the calendar year 1933, but summary data for certain prior years are also included for purposes of comparison, and charts showing, graphically, the trends of employment and earnings of wage-earners in the principal industries and municipalities appear in the appendix to this report. As there is no separate printed bulletin of this Division in which these tables and charts have been published, it has seemed advisable to include them in this report for purposes of permanent record.

During the year, the Division has further extended the scope of its monthly surveys relative to employment and earnings of wage-earners in the Commonwealth. These surveys now cover all of the important manufacturing industries, wholesale and retail trade, building and highway construction, public utilities, municipal employment, office employment and agriculture, and it is believed that the results indicate quite truly the changes from month to month in employment and earnings of those employed in all important fields of employment in Massachusetts.

A considerable addition to the work of the Division since May, 1933, has consisted in the furnishing of basic information for use by various agencies and individuals engaged in the formulation of codes in connection with the work of the National Recovery Administration. For the most part this information was already available either in printed or mimeographed reports of the Division, or was on file in manuscript form, but it was usually necessary to tabulate the data in such manner as to properly answer the purposes of the inquirer. In some cases special inquiries were undertaken in order to secure additional information supplementing that already available.

Industrial Changes in Massachusetts Since 1913

In discussing industrial changes, particularly at a time when a large portion of the wage-earning population is temporarily unemployed, or employed on short time with reduced earnings, it is the practice, all too prevalent, to compare existing conditions with the more prosperous conditions which existed during a former period of great industrial activity. Such comparison is apt to result in misleading conclusions as to the actual state of affairs. It is well, therefore, to determine whether or not, over a long period of time, the changes which have occurred are the result of permanent or merely temporary economic readjustments.

In this section of this report the industrial changes which have occurred in Massachusetts since 1913 are briefly reviewed.

In Table 1 data are presented, for the years 1913 to 1933, inclusive, showing the average number of wage-earners employed in the manufacturing industries in the Commonwealth, the average annual earnings of those employed, the real value of their yearly earnings, and the relative cost of living in Massachusetts, based on wage-earners' budgets. Corresponding index numbers for each of these items are also presented. These index numbers have been computed, using as a base (100.0) the respective data for the year 1913. The trends are shown, graphically, on the accompanying chart.

Table 1. — Industrial Trends in Massachusetts, 1913–1933

(Base — 1913 = 100)

Years	Average Number Employed in Manufacturing		Amount Paid in Wages during the Year		Average Annual Earnings		Index Numbers	
	Absolute	Index Number	Dollars (000 omitted)	Index Number	Dollars	Index Number	Cost of Living [1]	Real Value of Average Annual Earnings
1913	*616,927*	*100.0*	*$351,300*	*100.0*	*$569.43*	*100.0*	*100.0*	*100.0*
1914	606,698	98.3	341,310	97.2	562.57	98.8	102.1	96.8
1915	596,348	96.7	346,243	98.6	580.61	102.0	102.2	99.8
1916	682,621	110.6	447,958	127.5	656.23	115.2	110.4	104.3
1917	708,421	114.8	537,145	152.9	758.23	133.2	129.5	102.9
1918	719,210	116.6	679,401	193.4	944.65	165.9	154.5	107.4
1919	713,836	115.7	766,623	218.2	1,073.95	188.6	172.6	109.3
1920	695,832	112.8	891,177	253.7	1,280.74	224.9	195.3	115.2
1921	579,071	93.9	641,361	182.6	1,107.57	194.5	163.7	118.8
1922	612,682	99.3	678,074	193.0	1,106.73	194.4	156.1	124.5
1923	667,443	108.2	799,363	227.5	1,197.65	210.3	159.4	131.9
1924	589,364	95.5	711,812	202.6	1,207.76	212.1	159.2	133.2
1925	591,438	95.9	716,156	203.8	1,210.87	212.7	163.3	130.3
1926	602,343	97.6	738,209	210.1	1,225.56	215.2	163.1	131.9
1927	578,068	93.7	705,930	200.9	1,221.19	214.5	159.4	134.6
1928	540,927	87.7	670,063	190.7	1,238.73	217.5	159.8	136.1
1929	557,494	90.3	694,805	197.8	1,246.39	218.9	160.6	136.3
1930	481,449	78.0	573,838	163.3	1,191.89	209.3	155.0	135.0
1931	434,441	70.4	474,189	135.0	1,091.49	191.7	141.4	135.6
1932	350,521	56.8	334,359	95.2	953.89	167.5	122.4	136.8
1933 [2]	380,036 [2]	61.6 [2]	357,095 [2]	101.6 [2]	939.63 [2]	165.0	123.5	133.6

[1] Compiled from reports of the Massachusetts Commission on the Necessaries of Life, 1913–1929, and the Division on the Necessaries of Life, Massachusetts Department of Labor and Industries, 1930–1933.

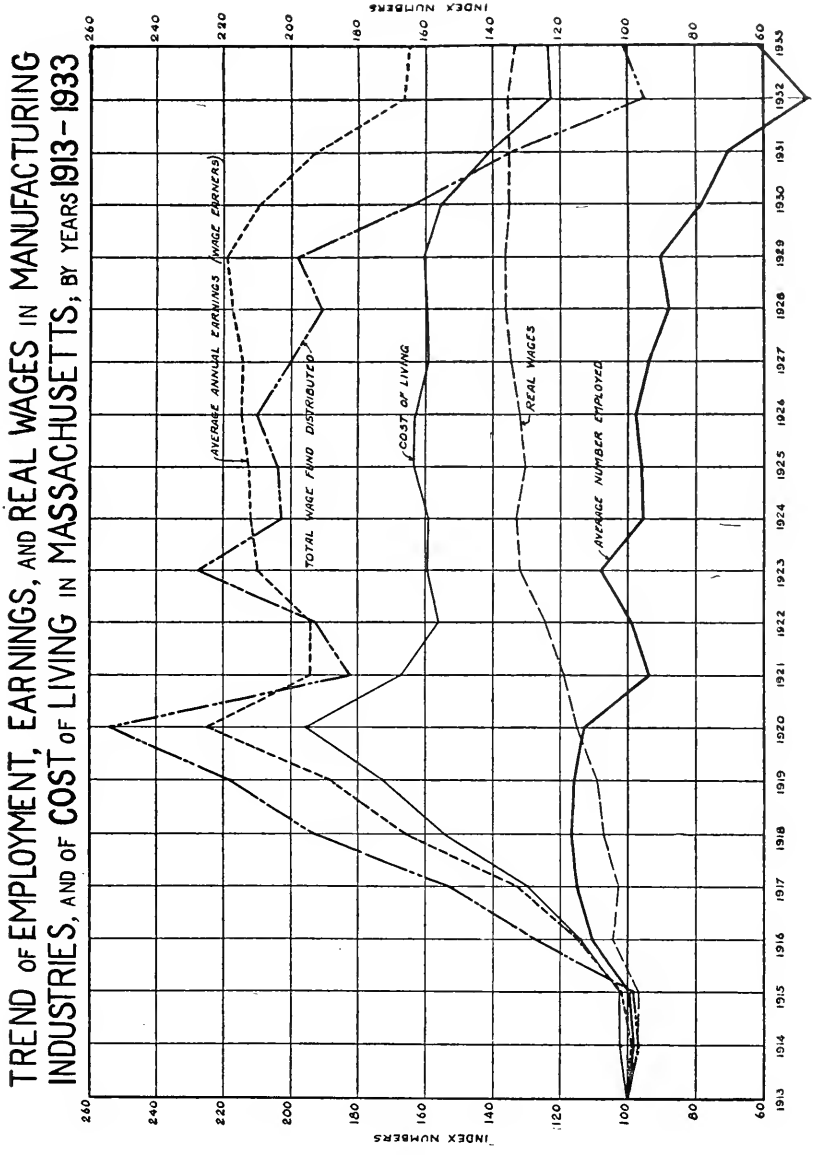
[2] Estimates based on results of "Monthly Surveys of Employment and Earnings in *Representative* Manufacturing Establishments," by the Division of Statistics, Massachusetts Department of Labor and Industries.

On reference to Table 1 and the chart, it will be observed that 1920 was the year of greatest industrial activity in Massachusetts. Then followed the industrial depression beginning the latter part of 1920 and continuing through the year 1921, and the early portion of 1922. Since 1923, except for the years 1926 and 1929, when slight improvements were noted, the number employed in the manufacturing industries has steadily decreased, until 1933 when an increase in employment was noted. These changes are indicated by the index numbers of employment for the several years, and by the curve on the chart designated as "Average Number Employed." The index number of employment for the year 1932 was 56.8, representing a reduction of 53.2 per cent in the number employed in that year, as compared with the number employed in 1913, and for 1933 the index number of employment was 61.6, showing an increase of 8.4 per cent in the average number employed in that year as compared with the average number employed in 1932. While this increase was relatively small, it is, nevertheless, highly significant because it represents a decided upward trend which was in marked contrast with the continuous downward trend during the three years, 1930, 1931 and 1932.

The present industrial depression, the beginning of which was marked by a general decline in industrial activity toward the close of the year 1929 in Massachusetts, as elsewhere throughout the United States, gained in intensity until the lowest point was reached in July, 1932. The year 1933 was the first year since the beginning of the depression in 1929 in which the trend line representing employment of wage-earners in all manufacturing industries, combined, in the State showed a general movement upward instead of downward. Although the depression had by no means run its course at the close of the year 1932, it was very evident, even at that time, that a marked improvement had occurred.

Certain other significant facts are disclosed by the data which appear in Table 1 and by the trend lines on the accompanying chart. Although the number of persons employed in the manufacturing industries in Massachusetts in 1933 was less by 38.4 per cent than the average number employed in 1913, the total amount paid in wages to those employed was greater by 1.6 per cent than the corresponding amount paid to those employed in 1913, and the average annual earnings of those employed in 1933 exceeded by 65.0 per cent the average annual earnings of those employed in 1913.

The *real* value, or purchasing power, of the average annual earnings of wage-earners employed in 1933, has shown no marked change, even during the present



depression, because of the large decrease in the cost of living since 1929. The *real* value of the average annual earnings in any year is determined by dividing the index number representing the average annual earnings, by the index number representing the cost of living. Although the cost of living in Massachusetts has fallen considerably from the peak in 1920, when the index number of the cost of living in Massachusetts, as computed by the Massachusetts Commission on the Necessaries of Life, stood at 195.3, as compared with the relative cost (100.0) in 1913 (the base year), the cost of living index number for 1933 was 123.5, or 23.5 per cent higher than in 1913. The index number in 1933 representing the *real* value, or purchasing power, of the average annual earnings of wage-earners employed in the manufacturing industries in Massachusetts was 133.6, or 33.6 per cent higher than the *real* value of the average annual earnings of those employed in 1913.

The depression, which at the close of December 1933, had continued for a period of more than four years, reached the lowest point in Massachusetts in July, 1932. During the latter half of the year, 1931, reductions in salaries and wages were beginning to be reported, and, from month to month thereafter, reductions were reported in rapidly increasing numbers, with the result that in 1933 reductions in rates of wages, seldom less than 10 per cent, and usually greater, had become effective quite generally in all lines of employment throughout the State. In 1929 the average annual earnings of wage-earners in the manufacturing industries in Massachusetts amounted to $1,246.39, while in 1933 the corresponding amount was $939.63 — a decrease of $306.76 or 24.6 per cent, due to decreases in rates of wages and part-time employment combined. During this period, 1929 to 1933, there was a decrease of 23.1 per cent in the cost of living, which was slightly less than the percentage decrease (24.6) in the average annual earnings of those *actually* employed. Those wage-earners, however, whose income was reduced in excess of 23.1 per cent, were forced to reduce their standard of living, notwithstanding this large decrease in the cost of living.

In the foregoing paragraphs reference has been made to employment and earnings of wage-earners in the *manufacturing* industries, considered as one general group. Later in this report consideration in some detail will be given to the fluctuations in employment and earnings of wage-earners in the principal manufacturing industries, separately, and in other important fields of employment. While it is true that there have been marked reductions in the numbers employed and their earning power in nearly all lines of business during the past four years, all have not been affected to the same extent. The building and construction industry appears to have been affected more seriously than other industries or fields of employment, notwithstanding earnest efforts which have been made to stimulate activity by the promotion of federal, state, county and municipal building and highway projects. Of the principal manufacturing industries, the textile and boot and shoe industries, and the manufacture of machinery ranked next to the building and construction industry among those industries most seriously affected. Wholesale trade and retail trade, which are directly affected by the depleted purchasing power of consumers, of whom wage-earners form a very large percentage, may be mentioned as the next in order. Public utilities, office employment and agriculture were affected to a less extent. The numbers employed in municipalities were not generally reduced until the close of 1932, but in many of the cities and towns salaries were reduced in most cases by ten per cent or more, either by direct order or by voluntary contributions of employees.

Labor's Share in Production, 1913–1932

In order to determine whether or not the wage-earners' share of the income from production has decreased in recent years as a result of the increased use of machinery in the manufacturing industries and a consequent increase in the volume of products manufactured per employee, the records for a period of 20 years (1913–1932) have been assembled and computations have been made showing the percentages which the amount paid in wages constituted of the value of goods produced and of the value added by manufacturing processes. For each of the years, 1913–1932, inclusive, the following basic data, obtained in connection with the Annual Census of Manufactures in Massachusetts, are presented in Table 2: amount of wages paid during the year; value of the products; and value of stock and materials used. The value added by manufacture, also shown in the table, is the difference between the value of products and the value of stock and materials used, and is the increment in value resulting from the joint use of capital and labor. The percentage which wages constituted of the value of products is derived by dividing the amount of wages paid during the year by the value of products during that year, and the percentage which wages constituted of the value added by manufacture is derived by dividing the amount of wages paid during the year by the value added by manufacture during that year.

On reference to the percentages which wages constituted of the value of products (Table 2, Column e), it will be observed that while there was some fluctuation in these percentages during the period 1913 to 1932, no marked increase or decrease

Table 2. — Percentages Which Wages Constitute of Value of Products and Value Added by Manufacture in Massachusetts, 1913–1932

(Source — Annual Statistics of Manufactures in Massachusetts)

Years	Amount of Wages Paid During the Year (000 omitted)	Value of Products (000 omitted)	Value of Stock and Materials Used (000 omitted)	Value Added by Manufacture (000 omitted)	Percentage Which Wages Constitute of — Value of Products	Percentage Which Wages Constitute of — Value Added by Manufacture
	a	b	c	d	e	f
1913	$351,300	$1,658,729	$961,778	$696,951	21.2	50.4
1914	341,310	1,641,373	931,384	709,989	20.8	48.1
1915	346,243	1,692,445	959,662	732,783	20.5	47.3
1916	447,958	2,349,933	1,354,433	995,500	19.1	45.0
1917	537,145	3,020,558	1,782,440	1,238,118	17.8	43.4
1918	679,401	3,851,346	2,249,823	1,601,523	17.6	42.4
1919	766,623	4,011,182	2,260,713	1,750,469	19.1	43.8
1920	891,177	4,370,277	2,489,237	1,881,040	20.4	47.4
1921	641,361	2,849,414	1,441,033	1,408,381	22.5	45.5
1922	678,074	3,002,626	1,512,510	1,490,116	22.6	45.5
1923	799,363	3,570,543	1,835,218	1,735,325	22.4	46.1
1924	711,812	3,126,137	1,629,342	1,496,795	22.8	47.6
1925	716,156	3,426,617	1,794,643	1,631,974	20.9	43.9
1926	738,209	3,419,815	1,790,611	1,629,204	21.6	45.3
1927	705,930	3,317,852	1,678,812	1,639,040	21.3	43.1
1928	670,063	3,224,228	1,663,156	1,561,072	20.8	42.9
1929	694,805	3,392,162	1,681,433	1,710,729	20.5	40.6
1930	573,838	2,676,387	1,333,317	1,343,070	21.4	42.7
1931	474,189	2,157,450	1,015,094	1,142,356	22.0	41.5
1932	334,359	1,521,753	718,348	803,405	22.0	41.5

in the wage-earners' share of the value of products over the long period of time has occurred. The lowest percentage was 17.6 in 1918 and the highest percentage was 22.8 in 1924. The average for the entire period of 20 years was 20.9; for the first 10 years the average was 20.2; and for the last 10 years it was 21.6.

The percentages which wages constituted of the value added by manufacture (Table 2, column f) also fluctuated from year to year. The highest percentage (50.4) was in 1913, the year just prior to the beginning of the World War, and the lowest percentage (40.6) was in 1929, a year of rather pronounced industrial activity. The average of the percentages for the 20 years was 44.7; for the first 10 years the average of the percentages was 45.9; and for the last 10 years the average was 43.5.

As noted, above, the highest percentage was 50.4 in 1913. In Table 2, basic information and percentages are not given for years prior to 1913, but in order to determine whether the percentage (50.4) for 1913 was one of a series of similarly high percentages for prior years, the data for the three years, 1899, 1904, and 1909, were examined and it was found that the percentages which wages constituted of the value added by manufacture were: 47.7 in 1899; 46.7 in 1904; and 45.6 in 1909, indicating that the percentage, 50.4, was exceptionally high.

The information above given relates to all manufacturing industries in Massachusetts, considered as a combined group. While it is evident that there was some fluctuation from year to year in the share of value of products and of the value added which the wage-earner received as compensation for his labor, the results of this inquiry do not show that in either respect his proportionate share during the two decades changed sufficiently to justify any definite conclusion as to any material change in his economic status. A further inquiry with reference to individual industries, particularly those in which there has been a general replacement of hand labor by machinery, might show very different results.

Statistics of Labor

The statistics of labor collected by the Division of Statistics are published either in print as "Labor Bulletins", or as "press announcements" in mimeographed form. The press announcements present in detail the results of the regular monthly surveys and of special inquiries, and are issued in order that information of current

interest may become immediately available. Summaries of the results of the monthly surveys and special inquiries are published in the Annual Report of the Division of Statistics which forms a part of the Annual Report of the Department.

Labor Bulletins

Labor Bulletin No. 167. Annual Directory of Labor Organizations in Massachusetts, 1933. This directory contains, as in previous editions, the name, location, time, and place of meetings and the name and address of the secretary and business agent of each labor organization having its headquarters in Massachusetts, together with a list of all the national and international labor organizations having one or more affiliated local unions in the United States, and the names and addresses of their respective secretaries, insofar as these items could be ascertained.

The number of organizations listed in this directory was 1,517, of which 135 were national and international organizations, 64 were state and district councils, 95 were central labor unions and councils, and 1,223 were local unions.

Labor Bulletin No. 168. Time Rates of Wages and Hours of Labor in Massachusetts, 1933. This is the twenty-fourth of a series of annual reports of a similar nature, the first of which was issued by the former Bureau of Statistics in 1910. Nearly all of the information published in the earlier reports of this series was obtained from officials of labor organizations, and the reports for each of the years, 1913 to 1923, inclusive, were published under the title, "Union Scale of Wages and Hours of Labor in Massachusetts." From year to year the additional information obtained from employers has been included and, beginning with the report of 1924, the reports have been issued under the more appropriate title "Time Rates of Wages and Hours of Labor in Massachusetts."

The information obtained from officials of local trade unions relates to basic rates and hours of labor, the terms of which in most instances are definitely expressed in joint agreements between employers and employees. These data are presented by industries, trades, and occupations and by municipalities represented. By changing the method of presentation of certain classes of information, it was possible to reduce the number of pages in this report without omitting any details of importance. As in former years, data with reference to union rates of wages and hours of labor in Boston, Fall River, Springfield, and Worcester were furnished to the United States Bureau of Labor Statistics for publication in its annual report covering a large number of cities in the United States.

Additional information, obtained from official records of employers, has reference to rates of wages and hours of labor affecting employees in Massachusetts who are engaged in certain classes of municipal service, and by street and electric railway companies, passenger bus companies, and in telephone service.

Monthly Surveys and Press Notices

Introductory. The scope of the "Monthly Surveys" of employment and wage-earners in Massachusetts has been extended from a small beginning in September, 1922, when reports were received from only 202 manufacturing establishments in which 120,804 wage-earners were employed, to a total of 8,027 establishments covered by reports received in December, 1933, representing all important fields of employment in the State and covering 378,178 wage-earners.

In this branch of its work, the Division of Statistics co-operates with the United States Bureau of Labor Statistics, thereby avoiding duplication of work in the collection of pay roll data by the two governmental agencies. The federal bureau has granted the franking privilege in connection with a large part of this work, and the postage expense on account of the remainder is relatively small.

In 1931 the surveys were extended to include all important fields of employment in Massachusetts not previously canvassed. In 1932 and 1933 attention was given to improving the list of representative reporting agencies and to increasing the coverage, so as to secure, wherever possible, a representation of at least 40 per cent of the total number of wage-earners employed in each important industrial and business group. For several groups, such as public utilities (steam railroads, street and electric railways, passenger bus companies, gas and electric companies) and highway construction, a comparatively small number of reports furnishes a representation of 90 per cent or more. On the other hand, in some lines of employment it is not feasible to attempt to secure a 40 per cent representation, or "sample",

because the number of persons employed by individual employers in most instances is so small that a very large number of reports would be required to furnish a 40 per cent representation; in agriculture, for example, there are very few farms, market gardens, dairies, etc., where as many as five persons are employed throughout the year in agricultural labor, and consequently the representation thus far secured is only about five per cent.

The questionnaires used in connection with these surveys are simple in form and so devised that the information called for can readily be entered from the employers' pay rolls. Information relative to manufactures, wholesale and retail, office employment, agriculture, and miscellaneous employment is obtained on a "six-month form," which provides spaces for entries for the pay roll period, including the 15th of the month, for each of six months. This form is returned to the employers each month for the addition of pay roll data for the next pay roll period. For public utilities three one-month forms are used, each calling for certain details relating to the particular class of public utility to which it applies. For building and highway construction a one-month form has been so devised that contractors may furnish information by projects and their locations, which usually vary from month to month. The form used in obtaining pay roll data from municipalities provides for reports by departments, separately, because in some municipalities there is no central office where pay roll records for all departments are on file; this form also provides for a separate reporting of pay rolls for two classes of employees.

With the questionnaire there is sent to reporting employers each month a mimeographed press notice summarizing the returns for the previous pay roll period, in order that they may compare the trends of employment and wages in their own plants with the corresponding trends for all reporting establishments in the same, or closely allied industry or business in which they are engaged. These press notices are also sent to a large number of organizations and individuals who have requested them.

The results of the survey are made public each month in the form of mimeographed press announcements,[1] in which data are presented showing the number of establishments reporting, the number of wage-earners employed, and the earnings of wage-earners according to the pay roll of the reporting establishments, and certain other particulars for the week including or ending nearest the fifteenth of the current month and the next preceding month. Copies of the press announcements are issued to the press and to a large number of organizations and individuals who have requested that such announcements be sent regularly as issued. Copies are also mailed, with the questionnaire for the next month, to all concerns included in the lists of those reporting, in order that the employers may compare the trends of employment and wages in their own plants with the corresponding trends for all other reporting establishments in the same industry which they represent.

Index numbers of employment and earnings of wage-earners have been computed for eight major industrial groups and for 29 sub-divisions. These appear later in this report, in connection with the discussion relative to the several principal employment groups. In computing these index numbers it has not yet been possible to adopt a uniform base period for all of the series because of the comparatively recent extension of the surveys to certain classes of employment, for which data are not available for more than two full years. The data relative to manufactures are available for each month during a period of ten years, and the three years, 1925, 1926, and 1927, were selected as a base period in computing the series of index numbers. For building construction, the year 1928 was taken as the base year, and for public utilities the base year is 1930. For all other series the single month (September, 1931) was adopted, temporarily, as the base month. In the course of a year or two, the several series of index numbers will have covered a sufficient number of years to justify the adoption of a uniform base period to be used in computing each of the series of index numbers, and it should also then be possible to compute a "composite index," covering all principal lines of employment in the Commonwealth.

[1] The press announcements issued each month relate to the following:

Manufactures	Public utilities	General summary
Wholesale and retail trade	Municipal employment	Summary — Eleven cities
Building construction	Agriculture	
Highway construction	Office and miscellaneous	

Table 3. — Coverage of Monthly Surveys of Employment and Earnings of Wage-Earners in Representative Establishments in Massachusetts, December, 1933: By Industrial Groups

Industrial Groups	Survey First Undertaken		Number of Establishments Reporting	Number of Wage-Earners Covered	Total Amount of Wages Paid to Wage-Earners Covered (one week)	Approximate Size of Sample Percentage [1]
	Month	Year				
Manufacturing	*Sept.*	*1922*	*1,137*	*188,018*	*$3,437,588*	*40.0*
Wholesale and Retail Trade	*Nov.*	*1929*	*4,877*	*90,309*	*1,799,685*	*40.0*
Wholesale trade	Aug.	1931 [2]	711	15,317	394,507	30.0
Retail trade	Aug.	1931 [2]	4,166	74,992	1,405,178	45.0
Public Utilities	*Jan.*	*1929*	*131*	*45,199*	*1,272,862*	*95.0*
Steam railroads	Jan.	1929	6	20,756	547,877	100.0
Street and electric railways	Jan.	1929	14	9,829	317,853	95.0
Passenger bus companies	Apr.	1931	25	1,397	35,254	90.0
Gas and electric companies	Jan.	1929	86	13,217	371,878	95.0
Construction	*Apr.*	*1927*	*787*	*5,902*	*128,320*	*35.0*
Building construction	Apr.	1927 [2]	703	4,011	91,794	25.0
Highway construction	June	1931 [2]	84	1,891	36,526	90.0
Municipal Employment	*Apr.*	*1931*	*94*	*21,159*	*523,294*	*70.0*
Agriculture	*Sept.*	*1931*	*97*	*1,057*	*17,884*	*5.0*
Office and Miscellaneous Employment	*March*	*1931*	*924*	*30,173*	*632,547*	*25.0*
Amusement and recreation	March	1931	138	2,961	66,330	50.0
Banks and trust companies	March	1931	176	3,245	92,345	40.0
Dyers and cleansers	March	1932	80	1,793	27,392	75.0
Hospitals	March	1931	32	3,479	50,941	25.0
Hotels and hotel restaurants	March	1931	81	5,061	69,761	35.0
Insurance companies and agencies	March	1931	97	4,083	124,083	30.0
Laundries	March	1931	114	3,797	61,429	30.0
Schools and colleges	March	1931	24	1,304	29,959	50.0
Trucking and handling	March	1931	107	3,080	72,975	25.0
Miscellaneous offices	March	1931	75	1,370	37,332	15.0
Totals	–	–	8,047	381,817	$7,812,180	–
Less duplication [3]	–	–	20	3,639	99,362	–
All Industrial Groups Combined	–	–	*8,027*	*378,178*	*$7,712,818*	*30.0*

[1] Based on number reported as "gainfully employed" — Federal Census, 1930.
[2] Group sub-divided beginning with returns for the date shown.
[3] Certain public utility companies are also included under "Manufacturing."

In Table 3 data are presented showing, for each industrial group covered by the survey, the year and month in which the survey was first undertaken, and (as of December, 1933), the number of establishments and number of wage-earners covered, the total amount paid in wages (in one week) to the wage-earners covered, and the approximate size of the sample, expressed as percentages of the total number of persons "gainfully employed" in the respective industrial groups, according to the Federal Census of 1930.

A truly representative list of reporting establishments should include large, medium-sized and small establishments in proper proportions. While it is difficult to meet this requirement without disturbing the representation by industries and municipalities, yet it has been possible, in a fair measure, to accomplish this purpose as indicated by the percentage distribution of wage-earners by size of establishments, as shown in Table 4. Of the total number of wage-earners covered by the returns in December, 1933, 29.9 per cent were in establishments in which less than 100 were employed and 29.3 per cent were in establishments in which 1,000 or more were employed. There was an under-representation in the other three groups when considered separately but considered as a single intermediate group (100–1,000), the combined representation was 40.8 per cent of the total. In classifying establishments by number of wage-earners employed it was not feasible to include building and highway construction and municipal employment in the tabulation.

Table 4. — Number of Concerns Reporting and Number of Wage-Earners Represented in Monthly Survey of Employment and Earnings in December, 1933 [1]

Classification by Number of Wage-Earners	Numbers		Percentages of Total	
	Units [2]	Wage-Earners	Units [2]	Wage-Earners
Less than 100	6,564	105,739	91.8	29.9
100 — 250	339	51,448	4.7	14.6
250 — 500	132	45,725	1.8	12.9
500 — 1000	69	47,102	1.0	13.3
1000 and over	47	103,654	0.7	29.3
Totals	*7,151*	*353,668*	*100.0*	*100.0*

[1] Exclusive of building and highway construction and municipal employment for which a classification of employers by number of wage-earners could not readily be made.

[2] For the purposes of this tabulation the term "unit" is defined as a separate establishment in which wage-earners are employed. Each of the individual establishments controlled by a central organization was included in this tabulation as a "unit." All of the units of each chain store organization were included in the group within which the *average* number of wage-earners per unit fell; for example, if the average number of wage-earners per unit in a chain store organization was less than 100, all of the units of that organization were included in the group "Less than 100 wage-earners."

Manufactures.—Approximately 1,150 manufacturing establishments are canvassed each month and the returns cover about 13 per cent of the total number of such establishments and about 40 per cent of the total number of wage-earners employed in manufacturing in the State. Efforts are made to maintain a list of reporting establishments which shall be truly representative, by industries, by municipalities, and by industries within the principal municipalities.

By means of this survey of representative manufacturing establishments it is possible to determine, shortly following the close of each month, the trend of employment and pay rolls during that month in each of the principal manufacturing industries and cities in the State and also to compute, approximately, in January of each year the average number of wage-earners employed and the total amount of wages distributed during the preceding year. For example, in January, 1933, such computations for the year 1932 were made, and when the results of the exhaustive annual census of manufactures for the year 1932 became available late in 1933 it was found that, according to the annual census returns, the average number employed in all manufacturing establishments in the State varied less than one-half of one per cent, and the corresponding amount paid in wages varied only 2.3 per cent, respectively, from the earlier estimates based on the monthly survey returns. In each case, the estimates were slightly less than the actual census totals, indicating that there was a small "downward bias" in the monthly survey data. In order to correct this downward bias the series of index numbers are adjusted each year in conformity with the latest census returns and such changes

are made from time to time in the list of reporting establishments as may be necessary to restore to the list its representative character. It is not possible to maintain an absolutely identical list of reporting establishments for a long period of time, because in the course of a year a few of those reporting either discontinue operations or remove from the State. In such cases others in the same industry and municipality are added to the list to replace those which cease to report. Because of unavoidable changes in the list of reporting establishments, the index numbers are computed by the "link-relative" method.

The results of the monthly survey of manufactures are presented in monthly press notices showing, for 37 principal industries and 26 leading industrial cities, the following data: number of establishments reporting; number of wage-earners normally employed, the number actually employed, and employed on full time; the average weekly earnings of those employed during the pay roll week including the 15th of the current and the next preceding month; and the average weekly earnings for each pay roll period. In addition to the text and detailed tables, there are also included in each issue, a graphic chart, showing the trend of employment and of the total amount of wages paid in all manufacturing establishments combined, a summary table showing percentage changes during the current month for each of the ten leading industries and for each of eleven of the leading cities; and index numbers of employment for all industries combined and for each of 20 leading industries.

Space does not permit of a full presentation in this report of the result of the monthly surveys, but three series of index numbers included in this section of the report show the trend of employment of wage-earners and amounts paid in wages in all manufacturing industries, as a group, and in each of the 20 leading industries in the State, by months, in 1933, with averages [1] for each of the years 1925–1933, inclusive, and also the trend of employment in each of the 14 leading industrial cities in 1932 and 1933. The index numbers of employment for each of the years 1925–1931, inclusive, were derived from the annual census data, and the index numbers for 1932 and 1933 were derived from monthly survey data. As soon as the exhaustive census data become available each year the index numbers based thereon are substituted for the index numbers derived from the representative returns. The index numbers representing amounts paid in wages were all computed from the monthly survey data because the annual census schedule does not provide for the reporting, by months, of the pay roll figures.

A series of charts, showing, graphically, the trends of employment and amount paid in wages to wage-earners in all manufacturing industries, combined, and in each of the 20 leading industries, by months, during the years 1925–1933, inclusive, and the trends of employment in the 14 leading industrial cities in 1931, 1932, and 1933, by months, appear in the charts [2] accompanying this report.

The index numbers representing the trend of employment in all manufacturing industries combined and in the 20 principal industries are presented in Table 5.

[1] The index numbers, *by months*, for the years 1925 to 1931 were published in the Annual Report of the Division for the year ending November 30, 1931, and are, therefore, not repeated here.

[2] See Charts, pages 80–88, Plates 1–9.

Table 5. — Index Numbers of Employment in Manufacturing Establishments in Massachusetts, All Industries Combined and Twenty Leading Industries: By Months, for the Years 1925–1933, inclusive

Base: — 100.0 = Average Number of Wage-earners Employed in the Three Year Period — 1925, 1926 and 1927.

Sources. — For base period, and for 1928, 1929, 1930, and 1931, the Annual Census of Manufactures: for 1932 and 1933, the Monthly Survey of Representative Manufacturing Establishments.

Years and Months	All Industries Combined	Cotton Goods	Boots and Shoes	Woolen and Worsted Goods	Electrical Machinery, Apparatus, and Supplies	Foundry and Machine-shop Products	Printing and Publishing
Number of Wage-earners [1]	*590,616*	*92,841*	*57,710*	*53,526*	*25,908*	*19,953*	*14,442*
1925	100.1	103.6	99.5	102.5	96.7	97.9	98.5
1926	102.0	98.5	103.5	102.1	107.7	102.3	101.9
1927	97.9	97.9	97.0	95.4	95.6	99.7	99.6
1928	91.6	70.2	96.1	84.5	95.7	99.2	101.3
1929	94.3	76.3	95.5	85.3	111.3	106.5	105.2
1930	81.5	57.9	85.1	65.6	93.5	92.7	104.2
1931	73.5	50.6	82.6	69.5	77.4	73.9	91.6
1932	60.6	36.5	83.8	57.8	52.5	50.3	83.9
1933	65.7	48.7	79.1	81.6	51.9	46.8	80.5
1933							
January	58.1	42.1	75.4	62.6	44.6	41.1	80.8
February	60.3	42.8	87.8	71.1	44.2	41.5	81.1
March	56.2	36.9	81.6	57.0	41.3	40.2	79.1
April	56.4	36.9	86.5	58.6	43.4	39.3	78.8
May	58.5	37.8	82.8	74.0	44.3	42.8	77.3
June	62.9	46.2	78.2	88.4	47.8	44.7	77.4
July	69.0	55.0	87.7	102.5	48.1	46.3	76.9
August	73.2	55.2	79.3	109.3	55.1	49.5	78.0
September	75.1	57.8	79.2	98.9	62.1	54.5	83.1
October	76.5	60.3	80.9	95.1	67.6	54.4	84.4
November	72.9	58.2	69.2	82.1	65.9	53.6	84.1
December	69.1	55.2	61.0	79.4	58.2	53.8	85.0

Years and Months	Dyeing and Finishing Textiles	Paper and Wood Pulp	Textile Machinery and Parts	Rubber Footwear	Rubber Goods, Tires, and Inner Tubes	Leather-Tanned, Curried and Finished	Hosiery and Knit Goods
Number of Wage-earners [1]	*13,823*	*12,829*	*12,773*	*12,081*	*10,516*	*10,482*	*10,100*
1925	100.4	100.7	107.2	94.3	102.1	99.6	104.5
1926	99.6	102.9	98.8	105.7	99.3	97.7	99.9
1927	100.0	96.4	94.0	100.0	98.6	102.7	95.6
1928	98.6	98.2	81.4	105.2	100.3	104.7	90.0
1929	104.5	96.4	83.0	92.4	92.9	102.2	87.3
1930	94.6	90.4	67.3	68.0	82.3	85.4	80.5
1931	94.5	83.0	58.9	52.0	64.0	82.6	75.6
1932	86.8	81.3	43.1	42.3	56.6	74.3	68.9
1933	92.7	80.9	59.1	48.9	64.8	92.0	73.8
1933							
January	87.9	79.7	43.0	43.3	52.8	76.1	64.5
February	89.9	78.1	41.6	39.5	51.2	82.3	64.6
March	86.8	77.9	40.6	32.7	49.8	81.3	62.6
April	84.2	76.5	40.0	34.6	41.2	64.2	63.3
May	76.4	78.7	42.8	35.1	51.8	87.1	62.9
June	82.1	79.1	48.9	37.9	66.1	99.3	70.3
July	94.8	83.2	60.2	47.0	74.8	108.8	80.7
August	106.3	84.9	74.0	57.5	86.4	112.8	93.2
September	98.0	84.4	79.1	62.0	84.5	105.0	86.6
October	102.1	82.6	81.7	63.3	80.3	101.9	85.7
November	103.0	82.3	80.5	66.4	72.4	94.5	78.0
December	100.9	83.0	76.9	67.0	66.5	90.7	73.6

[1] Average number of wage-earners employed in 1925, 1926 and 1927 = 100.

Years and Months	Clothing, Men's	Bread and Other Bakery Products	Confectionery	Furniture	Boot and Shoe Cut Stock and Findings	Silk and Rayon Goods[2]	Clothing, Women's
Number of Wage-earners[1]	*9,543*	*8,533*	*8,123*	*8,117*	*7,520*	*6,804*	*6,225*
1925	93.3	98.8	93.9	96.5	92.9	95.5	88.1
1926	102.8	101.9	103.1	104.0	103.8	96.4	100.1
1927	104.0	99.3	103.1	99.5	103.2	108.1	111.9
1928	102.2	102.8	92.2	101.3	101.3	99.7	115.0
1929	100.0	122.0	92.0	105.9	101.8	108.6	121.8
1930	101.1	117.7	80.5	90.6	92.0	83.5	122.2
1931	99.5	118.1	73.2	75.8	85.9	102.0[2]	135.7
1932	104.3	110.3	59.2	57.4	76.8	73.7[2]	110.0
1933	131.8	111.4	60.4	61.5	74.9	108.4[2]	97.2
1933							
January	96.6	104.6	56.0	52.8	71.0	79.7	92.3
February	113.3	106.7	53.2	53.5	78.1	82.1	100.4
March	110.5	107.8	50.4	51.4	68.2	78.4	90.4
April	110.2	109.3	51.3	52.7	70.7	76.3	100.2
May	103.6	108.5	49.1	55.1	71.2	90.1	106.0
June	132.9	111.5	50.5	58.8	74.9	104.7	103.0
July	151.4	111.6	52.2	62.9	87.1	123.8	85.5
August	149.5	111.8	58.9	65.6	88.0	141.4	96.5
September	157.9	114.8	65.4	72.1	80.1	144.6	112.2
October	164.2	116.8	80.2	75.1	74.4	137.8	110.3
November	157.1	117.0	84.7	70.1	66.3	128.1	88.3
December	133.9	116.1	73.4	67.8	68.5	113.8	81.0

[1] Average number of wage-earners employed in 1925, 1926 and 1927 = 100.
[2] Index numbers beginning with 1931 are not directly comparable with those for earlier years because one large company was included under woolen and worsted goods through 1930, but thereafter was included under silk and rayon goods, which became the predominant products.

For all manufacturing industries combined, the index number representing employment of wage-earners increased from 48.4 in July, 1932, the lowest point recorded during the depression, to 76.5 in October, 1933, an increase of 28.1 points, or 58.1 per cent. In February, 1933, there was an increase in the index number of employment to 60.3 from 58.1 in January. A decrease in March to 56.2 brought the index number below what it was in January, but thereafter for seven successive months the trend was gradually upward until the peak for the year (76.5) was reached in October. The decrease in employment in November and December offset the gain made in the three months August, September, and October. Almost invariably, there is decreased employment towards the close of the year, and the years of "depression" seemingly have the same characteristics in this respect as do normal years. The average of the index numbers for the year 1933 was 65.7, showing a gain of 8.4 per cent when compared with the average (60.6) for the year 1932.

Of the various important manufacturing industries in the State the manufacture of cotton goods continued to be one of the industries most adversely affected by business conditions. The January index number of employment was 42.1; for February it was 42.8; and for March and April 36.9; there was a slight improvement in May, to 37.8; a large gain was noted in June and July, and August was slightly better than July; September showed a fair gain, as did October which was the peak month of the year, for which month the index number was 60.3. It is interesting to note that the peak month in 1932 was February, with an index number of 50.1. Decreased employment in both November and December, 1933, brought the level of employment back to where it was in August. The average for the year was 48.7, as compared with 36.5 in 1932.

Of the major industries, the boot and shoe industry appears to have been the least adversely affected in 1932. The average of the monthly index numbers in 1933 was 79.1, which was somewhat below the corresponding average (83.8) for 1932. This was, quite probably, due to the extended labor controversy in the shoe factories in Brockton, which is one of the leading cities in the manufacture of men's shoes in Massachusetts. The usual two busy seasons were experienced, with the peak months February and July. December, with an index of 61.0, was the outstandingly low month, as it was in 1932.

The woolen and worsted goods industry in May showed a decided increase in employment over the first four months in 1933, followed by further gains in June, July, and August. The level of employment in August is represented by the index number 109.3, indicating that employment in August was 9.3 per cent better

than normal for the industry. Thereafter, however, employment decreased until the low point was reached in December (79.4). The average for the year was 81.6, a gain of 41.2 per cent when compared with the average for the year 1932 (57.8).

The trend of employment in the manufacture of electrical machinery, apparatus, and supplies (including radio apparatus) in 1933 showed tendencies almost exactly opposite to those noted in 1932, in which year the months of greatest employment were the first three. In 1933 the months of greatest employment were the last four, and the peak employment for the year 1933 occurred in October, represented by 67.6. The average for 1933 was 51.9, as compared with 52.5 for 1932.

In the manufacture of foundry and machine shop products employment in 1933 averaged slightly less than in 1932, and the industry had the same tendencies as those displayed by the electrical machinery industry; that is, employment showed little change during the first part of the year with slightly greater activity towards the close. The level of employment varied less than a full point during the last four months. The average for the year 1933 was 46.8, as compared with 50.3 in 1932.

The five major industries discussed above normally provide employment for more than one-half of the total number of wage-earners employed in all manufacturing industries in the State. For the other industries for which index numbers are presented in Table 5, the averages of the monthly index numbers for the year 1933, ranged in order from highest to lowest, were as follows: men's clothing (131.8); bread and other bakery products (111.4); silk and rayon manufactures (108.4); women's clothing (97.2); dyeing and finishing textiles (92.7); leather, tanned, curried, and finished (92.0); paper and wood pulp (80.9); printing and publishing (80.5); boot and shoe cut stock and findings (74.9); hosiery and knit goods (73.8); rubber goods, tires, and inner tubes (64.8); furniture (61.5); confectionery (60.4); textile machinery and parts (59.1); and rubber footwear (48.9).

For three of the 20 leading manufacturing industries in Massachusetts, the average of the monthly index numbers of employment in 1933 exceeded 100.0[1]. In the manufacture of men's clothing the high average (131.8) was a result of increased activity during the last seven months of the year. The manufacture of bread and other bakery products in Massachusetts has become increasingly important in recent years and even during the depression the production of such products, which are "necessaries of life" has been continuously maintained at a high level. In the manufacture of silk and rayon goods production was at a high level, particularly during the last seven months in 1933.

Index numbers representing the total amount paid in wages to wage-earners employed in all manufacturing industries, combined, and in each of the 20 principal industries during the years, 1925–1933, inclusive, are presented in Table 6.

The total amount paid in wages to the wage-earners employed in all industries combined, in 1933, was less by 51.3 per cent than the average for the three years 1925–1927, taken as a base period, but the index number (48.7) in 1933 exceeded by 3.1 points, or 6.8 per cent, the corresponding index number (45.6) for the year 1932. Although there was an increase of only 6.8 per cent in the amount of the pay roll in 1933 over 1932, the monthly trends for the two years were quite dissimilar. In 1932 the general trend was downward, and the lowest point for the year (35.8) was reached in July, followed by a gradual recovery to October (47.3). Thereafter the amount paid in wages decreased each month, except for a slight gain in February, to the low point (37.2) reached in March, 1933, followed by a gradual but continuous improvement, until the peak for the year 1933 (59.4) was reached in September. In October the index number (59.4) was the same as in September. The usual seasonal decreases occurred in November and December. It is particularly significant, however, that the index number for December, 1933, was 52.8, or 26.3 per cent higher than the corresponding index number (41.8) for December, 1932.

The index numbers representing the amounts paid in wages in 1933 in the 20 leading industries, arranged in order from the highest to the lowest, were as follows: bread and other bakery products, 94.1; men's clothing, 91.4; silk and rayon manufactures, 78.9; leather (tanned, curried, and finished), 75.2; dyeing and finishing textiles, 71.8; printing and publishing, book and job, and newspaper,

[1] *See* Table 5, pages 47 and 48.

Table 6. — Index Numbers of Total Amount Paid in Wages in Manufacturing Establishments in Massachusetts, All Industries Combined and Twenty Leading Industries: for the Years 1925–1933, inclusive, and by Months in 1933

Base — 100.0 = Average Amount Paid in Wages to Wage-earners Employed in the Three Year Period 1925–1926–1927.

Source — Monthly Survey of Representative Manufacturing Establishments.

Years and Months	All Industries Combined	Cotton Goods	Boots and Shoes	Woolen and Worsted Goods	Electrical Machinery, Apparatus, and Supplies	Foundry and Machine-shop Products	Printing and Publishing
1925	99.5	102.6	98.5	103.4	94.8	99.3	95.9
1926	101.8	97.0	104.4	101.0	108.8	105.2	101.9
1927	98.7	100.4	97.1	95.6	96.4	95.5	102.2
1928	92.9	68.3	95.0	83.5	99.3	96.8	104.1
1929	97.4	76.2	94.5	88.3	120.8	107.5	109.0
1930	78.6	54.6	74.0	63.0	87.8	87.9	106.8
1931	65.3	44.3	64.6	67.9	59.3	58.9	91.3
1932	45.6	25.4	56.0	44.7	33.6	32.2	77.0
1933	48.7	35.4	52.6	63.7	32.4	31.0	70.0
1933							
January	39.7	27.1	42.6	48.5	24.6	26.3	70.4
February	42.3	27.6	56.7	55.4	24.9	26.6	71.2
March	37.2	22.6	50.0	36.6	22.0	23.5	66.8
April	38.0	24.5	57.3	39.6	23.0	22.6	67.1
May	42.2	24.9	58.5	54.2	24.3	26.7	66.9
June	47.0	32.5	52.2	72.4	27.8	29.0	66.6
July	53.0	39.8	62.4	85.7	30.9	31.5	65.4
August	57.3	45.0	59.5	91.2	36.7	34.2	65.1
September	59.4	47.5	58.8	82.1	42.2	38.2	71.5
October	59.4	47.5	55.1	75.5	46.6	37.5	73.3
November	55.7	44.9	42.7	62.5	46.2	38.2	74.3
December	52.8	41.2	35.3	60.9	39.1	37.7	76.0

Years and Months	Dyeing and Finishing Textiles	Paper and Wood Pulp	Textile Machinery and Parts	Rubber Footwear	Rubber Goods, Tires and Inner Tubes	Leather-Tanned, Curried and Finished	Hosiery and Knit Goods
1925	99.8	99.6	111.3	94.6	103.0	97.1	102.9
1926	98.6	104.1	96.6	103.2	97.4	99.0	99.3
1927	101.6	96.3	92.1	102.2	99.6	103.9	97.8
1928	99.2	101.0	77.1	104.6	100.0	106.1	95.8
1929	106.8	99.9	87.0	91.8	91.2	106.4	99.3
1930	91.7	87.6	61.7	65.8	75.2	83.0	85.4
1931	91.4	68.2	50.3	42.4	54.4	74.3	74.4
1932	65.6	54.4	29.3	31.5	42.6	59.5	59.7
1933	71.8	52.6	48.4	35.8	45.8	75.2	59.8
1933							
January	60.3	47.0	30.0	27.5	36.5	55.7	46.1
February	69.0	45.8	27.3	25.9	33.8	64.5	46.2
March	62.7	45.8	24.8	19.4	28.2	61.1	48.0
April	59.2	43.5	22.3	22.6	25.5	47.4	49.4
May	58.1	49.5	29.1	25.1	38.5	69.5	45.6
June	70.4	52.7	44.3	27.3	52.7	85.5	55.6
July	79.8	59.2	55.6	37.9	57.4	99.0	64.2
August	86.8	60.8	65.1	43.7	62.4	95.8	80.7
September	77.0	59.5	70.6	47.2	60.1	87.2	77.3
October	81.0	56.3	72.7	49.1	56.4	83.6	73.2
November	78.9	55.0	71.6	51.3	50.0	78.0	65.2
December	78.0	55.7	67.0	52.3	48.6	74.7	65.9

Years and Months	Clothing, Men's	Bread and Other Bakery Products	Confectionery	Furniture	Boot and Shoe Cut Stock and Findings	Silk and Rayon Goods	Clothing, Women's
1925	92.3	96.5	91.4	94.0	91.5	95.8	88.0
1926	103.8	103.5	102.8	103.7	103.9	96.5	99.0
1927	103.9	100.0	105.8	102.3	104.6	107.7	113.0
1928	98.3	101.2	93.3	104.4	101.4	94.4	115.8
1929	95.1	119.9	90.9	109.9	103.9	104.0	120.0
1930	89.1	115.8	78.9	89.9	87.9	70.4	119.3
1931	78.5	115.8	64.1	65.7	78.4	79.4	120.8
1932	72.9	98.3	45.3	40.8	62.9	49.7	78.3
1933	91.4	94.1	44.5	41.0	58.3	78.9	63.8
1933							
January	59.1	88.9	40.5	33.8	55.0	52.8	54.5
February	73.8	92.2	36.3	34.9	61.8	57.4	60.7
March	71.7	90.4	32.4	26.6	49.3	43.6	45.5
April	59.7	89.6	32.0	31.3	52.2	41.5	66.4
May	59.7	90.4	31.4	34.1	59.3	65.5	66.8
June	87.2	93.1	33.4	38.1	61.4	79.9	67.1
July	106.7	95.1	35.2	42.5	71.2	97.2	49.2
August	118.3	91.5	41.8	44.7	70.9	109.7	66.1
September	125.7	99.0	54.4	54.0	64.2	112.6	88.5
October	128.7	100.3	68.6	57.8	52.7	106.7	86.8
November	121.3	100.5	62.7	47.8	47.9	97.1	60.4
December	85.2	98.3	65.5	46.5	53.2	82.3	53.4

70.0; women's clothing, 63.8; woolen and worsted goods, 63.7; hosiery and knit goods, 59.8; boot and shoe cut stock and findings, 58.3; boots and shoes, 52.6; paper and wood pulp, 52.6; textile machinery and parts, 48.4; rubber goods, tires, and inner tubes, 45.8; confectionery, 44.5; furniture, 41.0; rubber footwear, 35.8; cotton goods, 35.4; electrical machinery, apparatus, and supplies, 32.4; and foundry and machine-shop products, 31.0. Of the 20 principal manufacturing industries, the bread and other bakery products industry and the manufacture of men's clothing suffered less reduction relatively in the total amount of wages paid, and four of the major industries, cotton goods; boots and shoes; electrical machinery, apparatus, and supplies; and foundry and machine shop products, were among those most seriously affected by the depression.

In several industries there was a remarkable improvement in wages paid, from the low point to the high point for the year. For example, the total amount of wages paid in the textile machinery industry increased from the low point, 22.3 in April to 72.7 in October; silk and rayon goods from 41.5 in April to 112.6 in September; and men's clothing, from 59.1 in January to 128.7 in October. In each of the 20 industries, the highest point for the year occurred in one of the last six months of the year.

The lowest points recorded for the several industries were in March or April, as follows: rubber footwear, 19.4 in March; electrical machinery, apparatus and supplies, 22.0 in March; textile machinery and parts, 22.3 in April; cotton goods, 22.6 in March; foundry and machine-shop products, 22.6 in April; and rubber goods, tires and inner tubes, 25.5 in April.

The earnings of employees are affected by the continuity of their employment by part-time employment, and by changes in wage rates. The average weekly earnings of wage-earners employed in all manufacturing industries combined and in each of twenty leading industries for each of the years, 1925 to 1933, and also by months in 1933, are presented in Table 7.

Not until May, 1933, did the average weekly earnings of wage-earners in the various manufacturing industries show any marked increases. These increases were a result, in part, of the adoption of industrial codes providing for increases in the minimum rates of wages and upward adjustments in wage scales, and a general improvement in employment. In some industries the averages for 1933, because of the exceptionally low earnings during the first five months of the year,, were less than the corresponding averages for 1932, and, for all industries combined, the average weekly earnings in 1933 were $17.88, or 2.0 per cent less than the average in 1932, but the average for each of the last six months in 1933 was above the average ($18.24) for 1932.

For the 20 principal manufacturing industries, arranged in order from the highest to the lowest, the average weekly earnings in 1933 were as follows: printing and publishing, $29.60; foundry and machine shop products, $24.18; textile machinery and parts, $22.34; leather, tanned, curried, and finished, $21.21; bread and other bakery products, $20.79; dyeing and finishing textiles, $18.47; furniture, $17.72; paper and wood pulp, $17.66; electrical machinery, apparatus and supplies, $16.69; boots and shoes, $16.45; rubber goods, tires and inner tubes, $16.30; boot and shoe cut stock and findings, $16.20; woolen and worsted goods, $15.33; silk and rayon goods, $15.03; rubber footwear, $15.15; men's clothing, $14.50; hosiery and knit goods, $14.03; women's clothing, $13.70; cotton goods, $13.51; and confectionery, $13.24. In this connection, it is of interest to note that in the industries in which a large proportion of the employees are men the average weekly earnings were decidedly greater than in those industries in which a large proportion of the employees are women.

The effect of the depression on the earnings of wage-earners is indicated by a comparison of the average weekly earnings in 1933, with the corresponding earnings during the base period 1925–1927. For all manufacturing industries combined, there was a decrease from $23.39, the average for 1925–1927, to $17.88 in 1933, or 23.6 per cent. For the 20 leading industries the corresponding decreases, expressed in percentages arranged from the lowest to the highest, were as follows: printing and publishing, 11.5; textile machinery and parts, 12.2; foundry and machine shop products, 16.0; dyeing and finishing textiles, 17.4; bread and other bakery products, 18.4; leather, tanned, curried, and finished, 18.7; confectionery,

21.7; hosiery and knit goods, 22.5; boot and shoe cut stock and findings, 26.2; boots and shoes, 26.2; men's clothing, 26.7; silk and rayon goods, 27.0; cotton goods, 27.1; paper and wood pulp, 27.6; woolen and worsted goods, 30.6; furniture, 31.2; rubber footwear, 32.8; rubber goods, 34.4; women's clothing, 36.7; and electrical machinery, apparatus and supplies, 37.5.

In 1933, there was an increase of 17.4 per cent in the average weekly earnings of wage-earners employed in the manufacture of textile machinery and parts over the corresponding average in 1932, which was the largest percentage increase reported in any of the 20 principal manufacturing industries, and in the manufacture of silk and rayon goods there was an increase of 6.1 per cent. Percentage decreases in 1933 as compared with 1932, in the average weekly earnings, exceeding five per cent, occurred in the following industries: clothing, women's, 7.3; furniture, 6.9; rubber goods, tires and inner tubes, 6.7; hosiery and knit goods, 6.6; printing and publishing, 5.7; bread and other bakery products, 5.2; and confectionery, 5.1.

Table 7. — Average Weekly Earnings in Manufacturing Establishments in Massachusetts, All Industries Combined and Twenty Leading Industries: For the Years 1925–1933, inclusive, and by Months in 1933

Base — Average Weekly Earnings of Wage-earners Employed during the Three Years, 1925, 1926 and 1927.

Source: — Annual Census of Manufactures, 1925–1932, and Monthly Survey of Representative Manufacturing Establishments, 1933.

Years and Months	All Industries Combined	Cotton Goods	Boots and Shoes	Woolen and Worsted Goods	Electrical Machinery, Apparatus, and Supplies	Foundry and Machine-shop Products	Printing and Publishing
*Basic Weekly Earnings**	*$23.39*	*$18.52*	*$22.29*	*$22.08*	*$26.68*	*$28.78*	*$33.44*
1925	23.23	18.31	21.88	22.70	26.87	28.39	23.17
1926	23.51	18.64	22.62	21.75	26.91	28.98	33.16
1927	23.42	18.59	22.37	21.80	26.27	28.98	33.99
1928	23.76	18.01	22.08	21.99	26.29	29.49	34.86
1929	23.91	17.76	22.35	21.97	27.27	29.77	35.48
1930	22.86	16.90	19.85	21.44	25.31	28.61	34.51
1931	20.94	15.87	18.38	19.29	21.76	24.51	34.02
1932	18.24	13.41	16.33	15.23	17.32	23.66	31.38
1933	17.88	13.51	16.45	15.33	16.69	24.18	29.60
1933							
January	16.61	12.26	14.04	14.85	15.00	23.59	29.84
February	17.05	12.18	16.05	15.55	15.36	23.55	30.08
March	16.10	11.63	15.23	12.81	14.51	21.53	28.95
April	16.39	11.17	16.48	13.47	14.43	21.16	29.16
May	17.53	12.54	17.57	14.63	14.95	22.96	29.63
June	18.17	13.40	16.57	16.35	15.82	23.85	29.46
July	18.65	13.78	17.69	16.69	17.48	25.06	29.12
August	18.99	15.53	18.64	16.65	18.14	25.39	28.61
September	19.19	15.65	18.44	16.57	18.52	25.76	29.50
October	18.82	15.00	16.92	15.85	18.79	25.39	29.74
November	18.51	14.71	15.33	15.19	19.09	26.24	30.29
December	18.51	14.24	14.39	15.31	18.30	25.80	30.63

Years and Months	Dyeing and Finishing Textiles	Paper and Wood Pulp	Textile Machinery and Parts	Rubber Footwear	Rubber Goods, Tires and Inner Tubes	Leather-Tanned, Curried and Finished	Hosiery and Knit Goods
*Basic Weekly Earnings**	*$22.34*	*$24.39*	*$25.45*	*$22.54*	*$24.84*	*$26.10*	*$18.10*
1925	22.26	24.39	24.90	22.78	24.83	26.05	17.66
1926	22.25	25.35	25.51	20.29	25.07	26.25	18.09
1927	22.52	24.67	25.94	24.56	24.61	25.99	18.54
1928	22.15	24.99	25.18	22.58	24.93	25.40	19.33
1929	22.37	25.83	25.76	23.23	24.36	25.45	19.46
1930	21.76	24.60	23.44	21.68	23.17	24.95	18.58
1931	21.92	21.54	22.59	19.54	22.12	23.70	17.00
1932	17.90	18.20	19.02	15.68	17.46	20.92	15.03
1933	18.47	17.66	22.34	15.15	16.30	21.21	14.03
1933							
January	16.39	16.08	19.79	13.40	16.12	19.17	12.47
February	18.35	15.97	18.63	13.82	15.37	20.53	12.49
March	17.25	16.02	17.32	12.47	13.18	19.69	13.38
April	16.79	15.51	15.82	13.78	14.44	19.35	13.64
May	18.18	17.14	19.25	15.04	17.33	20.90	12.67
June	20.50	18.15	25.66	15.19	18.59	22.55	13.82
July	20.12	19.40	26.20	17.00	17.89	23.83	13.89
August	19.52	19.51	24.95	16.01	16.82	22.24	15.13
September	18.78	19.21	25.29	16.06	16.56	21.74	15.60
October	18.94	18.56	25.23	16.33	16.35	21.48	14.92
November	18.30	18.20	25.20	16.27	16.07	21.61	14.60
December	18.47	18.28	24.69	16.43	17.02	21.58	15.64

*Average for the three years, 1925, 1926 and 1927.

Years and Months	Clothing, Men's	Bread and Other Bakery Products	Confectionery	Furniture	Boot and Shoe Cut Stock and Findings	Silk and Rayon Goods	Clothing, Women's
*Basic Weekly Earnings**	*$19.79*	*$25.46*	*$16.90*	*$25.75*	*$21.94*	*$20.59*	*$21.65*
1925	19.35	25.92	16.99	24.91	21.94	20.19	20.68
1926	20.23	25.49	17.12	26.15	22.05	21.72	21.67
1927	19.79	24.97	16.59	26.19	21.82	19.86	22.59
1928	18.84	24.83	17.72	25.91	20.87	20.19	20.46
1929	19.85	25.24	17.32	26.61	21.02	18.44	21.40
1930	18.45	24.90	18.45	24.99	20.13	19.89	20.00
1931	16.51	24.27	16.09	21.98	18.89	16.06	17.70
1932	14.69	21.92	13.95	19.03	17.02	14.16	14.77
1933	14.50	20.79	13.24	17.72	16.20	15.03	13.70
1933							
January	13.03	20.91	13.24	17.18	16.16	14.00	12.40
February	13.86	21.25	12.51	17.53	16.52	14.76	12.71
March	13.82	20.64	11.76	13.91	15.10	11.74	10.57
April	11.54	20.17	11.43	15.95	15.41	11.48	13.93
May	12.26	20.49	11.72	16.59	17.39	15.35	13.24
June	13.97	20.54	12.10	17.40	17.12	16.11	13.68
July	15.01	20.96	12.36	18.15	17.08	16.57	12.10
August	16.84	20.12	12.98	18.28	16.83	16.38	14.40
September	16.95	21.21	15.23	20.11	16.75	16.44	16.38
October	16.69	21.13	15.66	20.67	14.80	16.34	16.53
November	16.34	21.13	13.55	18.31	15.08	16.00	14.37
December	13.54	20.84	16.35	18.42	16.20	15.26	13.85

*Average for the three years, 1925, 1926 and 1927.

There are presented in Table 8 index numbers representing the average number employed in manufacturing in each of the years 1925 to 1933, inclusive, in each of 14 of the leading industrial cities in Massachusetts, and also index numbers for each month in 1932 and 1933. The index numbers for 1932 have been adjusted in accordance with the *exhaustive* census returns for that year, and the index numbers for 1933 have been derived from data obtained in connection with the monthly survey of *representative* manufacturing establishments. Two charts showing the trend of employment in the manufacturing industries in the 14 leading industrial cities in Massachusetts are presented.[1]

In the 14 cities for which index numbers of employment in the manufacturing industries are presented in Table 8, the averages of the monthly index numbers for 1933, arranged in order from the highest to the lowest, were as follows: Lawrence, 77.2; Fall River, 73.4; Springfield, 66.3; Cambridge, 65.5; Lowell, 64.6; Holyoke, 64.1; Worcester, 62.7; Haverhill, 61.5; Brockton, 60.2; New Bedford, 58.2; Lynn, 56.1; Fitchburg, 55.3; Boston, 54.9; and Chicopee, 49.4. In nine cities there were increases in employment in the manufacturing industries in 1933, as compared with 1932, as follows: Fall River, 32.0 per cent; Holyoke, 25.0 per cent; New Bedford, 24.9 per cent; Lawrence, 16.4 per cent; Worcester, 14.4 per cent; Lowell, 9.7 per cent; Fitchburg, 9.3 per cent; Springfield, 6.4 per cent; and Cambridge, 3.1 per cent.

In Fall River, New Bedford, and Lawrence the large increases in employment were due, principally, to improvement in the textile industry, the predominating industry in each of these cities. In four cities there were decreases as follows: Lynn, 8.8 per cent; Boston, 6.5 per cent; Brockton, 4.4 per cent; and Haverhill, 4.4 per cent. In Chicopee there was no appreciable change in employment.

Wholesale and Retail Trade.—The collection of monthly pay roll data from wholesale and retail trade establishments was first undertaken by the Division in November, 1929. The survey has since been greatly extended in scope, and in December, 1933, 1,711 reports were received, covering 4,877 stores, in which 90,309 wage-earners were employed. The number of wage-earners covered constituted approximately 30 per cent of the total number employed in all wholesale and retail stores in the State, and is believed to be a truly representative sample.

The results of the monthly survey are made public in monthly press notices, showing the number of reports received, the number of stores reported for, the number of wage-earners employed, and the amount distributed in wages for each of ten principal trade groups, with a further classification by wholesale, retail, and chain stores, where such classification is applicable. Data are also presented for 11 cities which are important trading centers. For several groups of "chain" stores a separate tabulation of the returns by cities is not possible, but the omission of these returns from the tabulation by cities does not greatly impair the comparability of the results.

[1] See charts, pages 87 and 88, Plates 8 and 9.

Table 8. — Index Numbers of Employment in Manufacturing in 14 Leading Industrial Cities in Massachusetts for the Years, 1925–1933, inclusive

Base: — 100.0 = Average Number of Wage-earners Employed in the Three Year Period—1925, 1926 and 1927.

Sources. — For each of the years 1925–1932, inclusive, the Annual Census of Manufactures; for 1933 the Monthly Survey of Representative Manufacturing Establishments.

Years and Months	Boston	Brockton	Cambridge	Chicopee	Fall River	Fitchburg	Haverhill
Number of Wage-earners [1]	*78,364*	*12,682*	*21,859*	*10,171*	*31,146*	*8,411*	*11,080*
1925	98.7	103.8	100.4	103.6	98.2	105.5	104.0
1926	102.9	100.6	103.9	102.4	100.7	100.0	107.5
1927	98.4	95.6	95.7	94.0	101.1	94.5	88.5
1928	96.3	95.7	97.7	103.1	82.0	76.7	87.2
1929	97.7	99.3	100.6	105.8	84.3	78.2	75.5
1930	87.4	92.2	88.6	80.4	68.5	68.7	72.9
1931	74.1	84.0	73.8	64.2	70.8	60.5	64.4
1932	58.7	63.0	63.5	49.4	55.6	50.6	64.3
1933	54.9	60.2	65.5	49.4	73.4	55.3	61.5
1932							
January	65.9	70.2	65.4	59.7	60.8	50.6	52.5
February	65.2	72.3	64.6	60.7	73.2	50.3	76.5
March	64.3	72.7	65.3	60.7	65.7	50.9	81.3
April	60.7	63.5	64.8	53.9	44.1	49.6	67.6
May	57.9	54.9	63.5	46.3	36.0	48.3	60.4
June	54.0	54.7	63.1	41.7	36.4	49.2	61.4
July	47.4	66.8	58.9	44.3	40.7	45.0	57.7
August	54.0	69.4	60.2	43.3	48.6	51.6	71.0
September	58.0	60.8	64.2	42.1	65.5	55.0	69.9
October	60.7	65.3	67.8	45.6	64.9	52.4	66.8
November	58.6	59.0	63.9	46.9	61.6	50.9	57.3
December	57.7	46.3	60.5	47.9	69.7	53.0	49.2
1933							
January	52.8	61.8	57.1	48.5	69.7	53.6	53.9
February	54.0	62.7	59.7	48.8	69.4	49.4	66.2
March	52.0	62.0	58.9	45.0	55.9	45.8	48.4
April	52.6	62.0	59.7	34.4	61.8	44.5	59.1
May	54.3	59.7	60.4	38.7	63.9	50.2	63.7
June	53.7	58.4	62.1	50.6	75.6	56.7	66.6
July	55.7	66.5	65.9	56.3	79.4	60.5	70.6
August	53.1	71.8	69.4	59.7	69.9	61.9	66.6
September	60.0	34.0	73.7	57.6	78.7	59.7	74.7
October	61.0	54.6	74.4	54.3	85.4	62.7	68.7
November	56.9	66.8	73.4	50.1	86.9	60.7	48.2
December	52.7	61.7	71.7	48.8	83.6	58.0	52.1

Years and Months	Holyoke	Lawrence	Lowell	Lynn	New Bedford	Springfield	Worcester
Number of Wage-earners [1]	*16,499*	*25,983*	*20,405*	*20,551*	*35,808*	*17,989*	*31,047*
1925	103.0	101.1	105.7	92.2	101.1	98.3	100.3
1926	98.9	103.1	102.2	106.8	99.5	108.4	101.9
1927	98.1	95.8	92.1	101.0	99.4	93.3	97.8
1928	88.7	81.0	84.5	97.7	60.2	99.2	96.9
1929	83.5	89.1	83.8	99.8	91.1	103.6	102.8
1930	69.5	79.2	68.5	86.1	72.9	86.8	88.7
1931	62.8	90.4	67.2	76.3	66.7	77.5	77.2
1932	51.3	66.3	58.9	61.5	46.6	62.3	54.8
1933	64.1	77.2	64.6	56.1	58.2	66.3	62.7
1932							
January	53.2	70.7	60.3	75.4	48.6	67.2	57.3
February	55.8	80.1	65.4	80.4	53.1	67.8	57.7
March	53.9	85.7	65.6	76.0	51.2	66.6	55.7
April	52.3	72.2	54.5	68.0	45.7	65.7	54.3
May	49.7	59.4	48.8	63.2	37.9	62.9	53.3
June	45.4	53.5	51.0	55.4	28.5	63.0	52.5
July	42.1	56.2	48.6	55.7	35.7	56.7	52.0
August	42.7	62.4	64.8	59.6	40.3	54.8	53.7
September	53.8	69.3	69.0	57.8	52.6	57.7	55.3
October	56.9	65.5	70.7	57.8	57.6	61.6	57.4
November	55.2	60.8	53.2	46.7	55.4	62.3	56.6
December	54.8	60.2	54.6	41.2	52.4	61.7	52.1
1933							
January	54.4	62.4	64.5	46.3	53.0	57.9	50.6
February	53.9	75.1	69.9	55.5	55.5	56.6	50.3
March	51.8	62.0	67.4	48.5	48.9	53.8	50.0
April	51.3	65.5	63.8	48.7	41.8	53.0	49.9
May	56.5	76.0	46.4	53.0	45.5	56.4	54.3
June	65.6	84.1	60.9	48.5	54.2	61.7	58.5
July	74.8	92.1	68.2	56.1	66.2	65.7	65.3
August	79.6	97.8	73.6	58.3	69.4	73.3	72.7
September	76.9	85.7	67.0	65.9	69.0	78.8	76.9
October	73.0	84.5	70.2	67.5	69.7	79.4	78.0
November	67.6	71.6	61.6	64.9	65.4	78.9	75.5
December	64.2	71.5	62.1	60.0	59.4	79.5	70.2

[1] Average number of wage-earners employed in 1925, 1926 and 1927 = 100.

Table 9. — Index Numbers of Employment in Wholesale and Retail Trade — All Trade Groups and Each of Eleven Leading Groups; By Months; September, 1931–December, 1933

(Base — September, 1931 = 100.0)

Years and Months	All Trade Groups			Automobiles, Accessories, Gas and Oil	Candy, Soda, and Drugs	Department and Dry Goods Stores	
	Wholesale Trade	Retail Trade	Combined	Retail	Retail	"Chain"	Independently Owned
1931							
September	100.0	100.0	100.0	100.0	100.0	100.0	100.0
October	97.1	102.0	101.0	99.1	101.9	105.5	100.2
November	94.8	101.6	100.2	94.1	100.0	105.6	104.5
December	93.8	110.0	106.7	92.2	102.1	126.7	129.0
1932							
January	87.9	96.7	95.0	87.2	94.1	101.6	96.9
February	87.5	94.6	93.2	85.9	93.5	99.7	93.3
March	87.2	94.6	93.1	85.8	94.9	112.3	91.6
April	86.0	94.3	92.5	87.0	95.0	101.6	94.3
May	85.9	93.2	91.6	86.1	93.6	108.1	91.8
June	85.8	92.3	90.9	83.3	91.4	102.3	90.4
July	85.1	89.0	88.1	82.0	88.4	99.9	87.7
August	84.1	86.1	85.5	78.6	85.7	95.0	82.0
September	85.4	89.1	88.2	77.3	90.2	95.3	86.8
October	85.8	92.9	91.4	77.2	91.6	112.5	93.0
November	84.1	91.9	90.3	76.8	91.9	101.7	93.9
December	81.7	100.5	96.6	76.2	93.0	130.8	116.3
1933							
January	79.7	86.8	85.4	73.0	88.8	84.8	85.1
February	78.9	85.2	84.0	72.6	90.0	79.5	84.2
March	77.5	82.6	81.6	71.4	84.1	77.0	78.9
April	77.3	87.1	85.1	73.0	88.8	88.9	87.9
May	78.2	85.9	84.2	75.7	87.7	86.4	87.1
June	79.2	87.1	85.4	77.4	86.7	90.1	87.5
July	80.2	84.4	83.4	76.4	87.6	78.7	82.2
August	83.6	87.0	86.2	79.2	86.7	82.2	82.5
September	86.1	93.4	91.8	81.6	87.9	95.8	95.7
October	87.0	96.3	94.3	82.0	91.9	103.3	98.3
November	86.6	97.7	95.4	82.9	92.2	108.4	100.6
December	85.3	107.7	103.0	82.7	97.9	136.3	122.3

Years and Months	Fuel and Ice Retail	Groceries, Provisions, Meats and Fish			Lunch Rooms and Restaurants		Wearing Apparel and Accessories Retail
		Wholesale	Retail "Chain" Stores	Retail Independently Owned	"Chain"	Independently Owned	
1931							
September	100.0	100.0	100.0	100.0	100.0	100.0	100.0
October	115.9	98.3	99.6	99.3	101.2	106.1	103.1
November	113.9	96.6	98.8	97.7	100.7	101.1	103.0
December	114.5	95.8	100.4	97.1	103.4	98.5	116.8
1932							
January	116.2	88.8	99.7	92.2	100.4	96.4	95.0
February	113.9	88.9	98.8	93.2	102.1	93.3	90.3
March	116.5	88.6	95.8	92.8	102.0	94.0	91.1
April	100.7	87.4	95.6	92.5	100.7	94.9	93.1
May	95.6	86.8	96.3	93.2	100.7	93.5	90.0
June	91.1	86.2	97.2	92.5	97.9	92.1	94.2
July	87.6	86.6	96.9	90.3	95.7	86.9	86.6
August	85.3	86.4	96.7	89.2	95.1	83.4	82.6
September	94.3	85.4	95.7	92.3	96.5	86.9	88.4
October	106.7	86.3	95.0	93.1	96.1	86.6	93.1
November	103.4	85.4	93.5	92.5	95.0	86.0	94.2
December	113.3	83.9	93.5	92.8	93.8	85.5	106.7
1933							
January	112.6	82.4	91.3	92.2	95.7	82.9	86.3
February	115.1	81.9	90.9	92.8	96.0	81.9	81.6
March	115.2	81.2	88.0	91.4	95.2	79.0	79.7
April	101.8	81.8	87.3	92.2	94.7	79.7	92.1
May	87.2	82.0	86.9	91.9	93.2	79.9	89.0
June	86.4	81.2	88.7	91.8	94.1	77.3	91.4
July	92.4	81.7	89.8	90.8	93.6	75.5	87.3
August	95.4	86.0	101.2	96.8	95.0	78.1	82.7
September	96.2	88.0	100.2	97.7	101.8	82.4	93.3
October	102.5	89.1	100.1	100.0	104.1	82.8	98.7
November	105.8	87.3	100.1	100.8	107.3	81.8	99.9
December	114.9	87.0	101.1	96.5	109.0	80.3	114.6

Information in detail is not presented in this report, but two series of index numbers [1] and two groups of charts [2] showing the trends of employment and amount of wages paid for the principal trade groups, during the period September, 1931, to December, 1933, are here included. Because of unavoidable changes which occur in the list of reporting establishments the index numbers have been computed by the "link-relative" method, and in order that they may be directly comparable with index numbers for other classes of employment which were added to the monthly surveys in 1931, the returns for the month of September, 1931, have been taken as the base (100) in computing the index numbers.

A comparison of the index numbers of employment in Table 8 shows that during the year 1933 employment in the various branches of retail trade, considered as a single group, continued to be maintained at a generally higher level than employment in wholesale trade.

In wholesale trade, employment in each of the first seven months in 1933 was much below the level of the corresponding month in 1932. In August, 1933, there was a fair gain, which brought the level within a few points of August, 1932. In each of the months thereafter in 1933, employment was slightly greater than during the corresponding months in 1932.

Retail trade is subject to more marked fluctuations in employment than wholesale trade, largely because of seasonal conditions affecting sales, especially by department, dry goods, and wearing apparel stores. In general, however, both wholesale trade and retail trade, showed similar general trends. During the first seven months in 1933, the index numbers of employment in retail trade were lower than the index numbers for corresponding months in 1932, but during the last five months in 1933 the index numbers were higher than those for the corresponding months in 1932. In December, 1933, the index number was 107.7, the highest point reached since December, 1931, and exceeded by 7.2 per cent the index number (100.5) for December, 1932.

Of the 11 principal trade groups, the retail distributors of fuel and ice maintained a generally higher level of employment in 1933 than did any of the other groups. Next in order were the "chain" lunch rooms and restaurants, and the "chain" and the independently owned grocery, provision, meat, and fish stores. The retail distributors of automobiles, accessories, gas, and oil, "chain" and independently owned, and the retail wearing apparel and accessories stores showed the greatest seasonal fluctuations in employment, with especially large increases in December, as a result of Christmas trade.

The lowest level of employment in 1933 in each of these groups was in March, with a large increase in April, due to the Easter trade, which affected particularly the wearing apparel stores. There was also the usual summer dull season, which resulted in less employment in all three classes of stores. Employment in the "chain" lunch rooms and restaurants was at a higher level during each of the last three months in 1933 than at any other time during the period beginning September, 1931.

Index numbers representing the amount of wages paid to employees in wholesale and retail trade for the principal trade groups are presented in Table 10. The returns for the month of September, 1931, were taken as the base (100.0) in computing this series. Charts showing the trend of employment and of amount of wages paid in various branches of wholesale and retail trade are also presented.[2]

For wholesale trade the index numbers representing total amount of wages paid in 1933 showed little change from month to month, and a total variation during the year of less than ten points. The last half of the year was more favorable than the first half, but in the peak months, September to December inclusive, the amount paid in wages averaged almost the same as during the corresponding four months in 1932, which were the low months in that year. In retail trade the amount paid in wages in 1933, compared quite favorably, by months, with the amounts paid in 1932. The amount paid in wages during the earlier months in 1933 was much less than during the corresponding months in 1932, but during each of the last four months in 1933 the index number of wages paid was slightly in excess of the corresponding index number in 1932.

[1] See Tables 9 and 10.
[2] See Appendix, pages 89 and 90, Plates 10 and 11.

Table 10. — Index Numbers of Total Amount Paid in Wages in Wholesale and Retail Trade — All Trade Groups and Each of Eleven Leading Groups; By Months; September, 1931–December, 1933

(Base — September, 1931 = 100.0)

Years and Months	All Trade Groups			Automobiles Accessories, Gas and Oil Retail	Candy, Soda, and Drugs Retail	Department and Dry Goods Stores	
	Wholesale Trade	Retail Trade	Combined			"Chain"	Independently Owned
1931							
September	100.0	100.0	100.0	100.0	100.0	100.0	100.0
October	97.1	101.1	100.0	95.9	100.9	101.7	100.8
November	94.6	100.6	99.0	90.5	104.3	104.0	104.7
December	93.6	106.3	103.1	90.2	106.9	125.8	123.2
1932							
January	86.8	93.5	91.9	84.3	89.5	101.1	94.0
February	85.4	90.6	89.4	82.4	89.3	95.4	87.7
March	84.1	91.0	89.3	83.6	88.6	94.6	89.8
April	81.9	89.8	87.9	84.4	89.0	92.5	89.6
May	81.0	87.0	85.5	82.2	87.7	88.8	87.6
June	79.5	84.8	83.4	78.1	83.3	86.2	84.2
July	78.3	80.8	80.1	73.1	79.4	87.4	79.1
August	76.4	77.6	77.2	69.2	76.4	81.1	75.8
September	77.5	81.0	80.0	68.2	79.8	74.9	86.0
October	76.0	84.5	80.4	65.9	81.4	80.3	86.4
November	74.0	84.2	79.7	65.4	81.5	80.0	87.9
December	72.3	89.5	83.0	64.1	83.5	103.7	102.6
1933							
January	71.0	78.8	74.9	59.6	78.2	69.0	78.1
February	69.7	76.5	73.0	59.3	79.3	66.6	74.9
March	67.6	72.3	69.4	56.8	70.3	62.1	65.5
April	67.9	76.5	72.6	59.8	77.3	73.2	75.3
May	68.7	75.7	72.2	61.8	71.0	71.4	75.1
June	69.7	76.7	73.1	62.4	68.9	75.6	76.1
July	71.2	76.1	73.0	61.3	69.0	66.8	74.7
August	72.9	78.6	75.3	62.4	70.2	70.9	77.6
September	75.2	84.2	79.9	64.5	73.3	84.2	90.9
October	75.7	85.6	81.0	63.7	75.6	88.7	91.8
November	75.0	86.9	81.7	65.2	77.3	87.3	92.6
December	74.4	93.1	86.0	64.2	81.0	106.9	110.1

Years and Months	Fuel and Ice Retail	Groceries, Provisions, Meats and Fish			Lunch Rooms and Restaurants		Wearing Apparel and Accessories Retail
		Wholesale	Retail				
			"Chain" Stores	Independently Owned	"Chain"	Independently Owned	
1931							
September	100.0	100.0	100.0	100.0	100.0	100.0	100.0
October	111.9	97.5	99.2	100.2	102.0	102.4	103.0
November	107.8	95.9	98.7	98.5	104.6	98.5	103.1
December	117.8	95.6	99.4	98.0	105.8	94.3	110.5
1932							
January	113.4	88.1	94.3	92.0	100.4	93.1	93.6
February	113.5	87.3	93.5	92.3	100.1	91.1	88.8
March	118.4	86.0	93.3	90.5	99.2	90.6	88.5
April	96.7	84.2	92.9	90.4	93.8	90.6	90.6
May	79.8	82.7	92.3	89.7	93.8	87.7	86.2
June	74.0	81.1	92.6	89.3	90.7	84.2	86.4
July	75.0	80.3	90.4	87.1	87.3	78.1	80.0
August	68.1	78.9	89.3	84.5	86.5	74.4	76.4
September	82.6	78.3	88.9	85.8	88.5	76.9	80.1
October	86.6	77.7	87.8	87.0	87.5	78.9	83.2
November	88.5	76.1	86.7	85.4	86.5	77.2	83.2
December	100.6	75.6	86.3	85.1	85.2	74.9	91.2
1933							
January	98.8	75.8	83.0	83.7	85.3	71.9	74.5
February	107.4	75.3	83.0	82.8	84.6	69.2	65.5
March	101.7	73.7	81.8	80.4	84.1	66.0	62.7
April	83.3	74.9	82.0	80.1	83.8	67.1	75.6
May	67.5	74.7	81.7	79.3	82.5	67.8	74.6
June	65.1	74.8	83.3	79.4	82.4	66.0	76.8
July	76.8	75.8	85.0	79.3	81.6	64.0	73.8
August	74.3	77.6	92.9	83.5	83.2	66.0	72.0
September	78.5	79.8	92.8	85.3	88.4	72.9	78.8
October	81.3	80.7	93.2	86.6	89.4	71.7	83.1
November	90.1	78.9	94.1	86.7	90.4	70.3	85.3
December	100.2	78.6	95.3	84.5	91.2	69.9	93.3

The dismissal of employees after the Christmas season is clearly indicated when the index numbers for December and the following January are compared, not only for the entire retail trade group as a whole, but for the various groups specified.

In general, the fluctuations in the amount of wages paid in the principal trade groups corresponded closely with the fluctuations in the number of persons employed from month to month, except that when the regular force of employees was supplemented with additional employees for temporary sales, the increases in the amount of wages paid were not proportionately as large as the increases in the number of persons employed, indicating that salespeople employed temporarily are not as well compensated as those who are permanently employed. The same groups which have already been mentioned as showing most favorable employment conditions maintained a generally higher level of wage payments than did any of the other trade groups.

Building Construction. — The collection of monthly pay roll data from building contractors was first undertaken by this Division in April, 1927. The information called for included the following items: number of building tradesmen employed during the week including the 15th of the month; total number of hours worked; and the amount paid in wages. Reports were received each month in 1933 from about 700 building contractors who employed, in October, the peak month, nearly 5,000 building tradesmen, or approximately 25 per cent of the total number of building tradesmen employed in the State. Nearly all of the important general contractors and sub-contractors in the building industry are included in the list of those reporting each month. Pay roll data are furnished by individual projects, or groups of projects within a single city or town, and the returns are presented in the monthly press announcements, by classes of work done, and also by principal cities and towns. The amount of building construction in the several municipalities varies greatly from month to month, even though the totals for the State may not show any marked changes.

In order that the thousands of building tradesmen may find even fairly steady employment, it is quite necessary that there be those large individual projects which require a sizable force of workmen for a period of weeks, or months. Construction of this character was greatly lacking in 1933, as shown by the fact that of the total building, only about one-fifth consisted of the new non-residential type (office and bank buildings, public works, and utilities, factories, etc.). The value represented by additions, alterations, and repairs constituted about two-fifths of the total, and residential buildings, the other two-fifths. There was a limited number of large projects in the nature of additions and alterations, but for the most part, the projects in this class were small, and required few tradesmen. Residential construction was almost altogether in the nature of single dwellings, which may oftentimes be erected largely by the contractor himself, with occasional help as needed. These facts all lead to the conclusion that many building tradesmen, for whom no records appear in this survey, were intermittently employed in 1933, but it is almost impossible under conditions which existed, to ascertain just how many had work of any nature, and how extensive it was.

The data are tabulated so as to show, by type of work, the number of man-hours worked and the earnings of those employed, which additional information adds to the value of the returns as formerly presented.

The series of index numbers, computed by the "link-relative" method, showing the trends of employment, man-hours worked, amount paid in wages, and other items for each month in 1932 and 1933 are presented in Table 11. The index numbers for prior months, beginning with April, 1927, have already been published, and are not included in this table. A chart,[1] showing the trends of employment, total wages paid, and man-hours worked in the building construction industry, by months, during the period, April, 1927, to December, 1933, appears in the appendix.

[1] See Appendix, page 91, Plate 12.

*Table 11. — Index Numbers of Employment and Earnings of Building Tradesmen in Massachusetts as Reported by Building Contractors**

(Average for Year 1928 = 100.0)

Months	Number of Tradesmen	Number of Man-hours	Amount Paid in Wages	Average Weekly Hours per Man	Average Weekly Earnings per Man	Average Hourly Earnings per Man
1932						
January	44.2	34.6	34.4	78.3	77.8	99.4
February	38.6	28.7	28.1	74.4	72.8	97.9
March	38.1	28.4	27.8	74.4	73.0	97.9
April	44.0	33.0	31.0	75.0	70.5	93.9
May	47.8	39.9	35.4	83.5	74.1	88.7
June	46.8	37.1	32.9	79.5	70.2	88.4
July	43.9	35.3	31.0	80.4	70.6	87.8
August	40.7	32.6	28.2	80.2	69.3	86.5
September	40.0	33.4	30.0	83.5	75.0	89.8
October	40.7	31.9	27.5	78.4	67.6	86.2
November	38.4	28.9	24.3	75.3	63.3	84.1
December	30.8	21.8	18.8	70.8	61.0	86.2
Average, 1932	*41.2*	*32.1*	*29.2*	*77.8*	*70.4*	*90.6*
1933						
January	23.9	16.9	14.7	70.7	61.5	87.0
February	21.5	14.8	12.7	68.8	59.1	85.8
March	21.2	14.7	12.1	69.3	57.1	82.3
April	23.6	15.8	12.9	66.9	54.7	81.6
May	29.3	23.4	18.1	79.9	61.8	77.4
June	29.9	23.5	18.1	78.6	60.1	77.0
July	29.8	24.3	18.2	81.5	61.1	74.9
August	31.5	24.6	19.1	78.1	60.6	77.6
September	31.6	24.9	19.8	78.8	62.7	79.5
October	33.3	25.1	19.5	75.4	58.6	77.7
November	31.4	23.6	17.9	75.2	57.0	75.8
December	27.3	20.4	15.6	74.7	57.1	76.5
Average, 1933	*27.9*	*21.0*	*16.6*	*74.8*	*59.3*	*79.4*

* This survey was first undertaken in April, 1927.

On reference to Table 11 it will be noted that the employment of building tradesmen was at its lowest level during the first four months in 1933, not only with respect to that year, but also since the collection of these data was begun in 1927. The average of the index numbers representing employment for the months in 1933 was 27.9, a decrease of 30.2 per cent, as compared with 41.2 for the year 1932. The index number representing man-hours worked in 1933 was 21.0, or 34.6 per cent less than the corresponding index number (32.1) for 1932, and the index number (16.6) representing the amount paid in wages in 1933 was less by 43.2 per cent than the corresponding index number (29.2) for 1932. The average weekly hours worked per man in 1933 decreased by 3.9 per cent (from 77.8 in 1932 to 74.8 in 1933); the weekly earnings per man decreased by 15.8 per cent (from 70.4 to 59.3); and the average hourly earnings per man decreased by 12.4 per cent (from 90.6 to 79.4).

Highway Construction. — In 1931 the monthly surveys were extended to include highway construction. In 1933 reports were received each month from about 85 contractors, who employed, during the peak month, about 3,000 workmen. The reports received covered approximately 90 per cent of the total number of workmen employed on all highway construction done under contract in Massachusetts during the year. Somewhat less highway work was undertaken in 1933 than in 1932 by the State, counties, and municipalities in Massachusetts. The extent to which workmen were employed is indicated by the monthly index numbers of employment for the period September, 1931 to December, 1933, presented in Table 12. In computing these index numbers, the number of workmen employed in September, 1931, was taken as the base, 100.0.

According to the index numbers presented in Table 12, very little public highway work was done by contractors during the first five months in 1933. Beginning in June there was an increase, which continued through November, the peak month of the year, when the index number was 47.3.

In connection with the survey of municipal employment, discussed later in this report, pay roll data were obtained, showing the number of manual workers employed in the street, highway, and public works departments. Except for the fact that many additional laborers were employed temporarily in the cities and towns on snow and ice removal in February, 1933, the trends of employment of highway workmen by contractors and by municipalities were very similar. In each case the smallest number was employed in March, and the greatest number in November.

Table 12. — Index Numbers of Employment of Highway Workmen: By Months, September, 1931–December, 1933

(Base — September, 1931 = 100.0)

Years and Months	Workmen Employed on Public Highway Work by Private Contractors	Manual Workers Employed by City and Town Street, Highway, and Public Works Departments	Both Classes Combined
1931			
September	*100.0*	*100.0*	*100.0*
October	91.4	100.8	98.2
November	76.0	92.6	87.8
December	53.4	83.8	74.7
1932			
January	29.5	85.4	68.4
February	22.0	82.7	64.3
March	21.7	71.2	56.2
April	35.6	74.5	62.6
May	58.4	72.9	68.0
June	56.0	79.0	71.6
July	59.0	80.6	73.6
August	51.8	76.6	68.6
September	45.0	74.6	65.1
October	46.2	68.4	61.2
November	48.1	66.6	60.6
December	30.0	70.2	57.5
1933			
January	26.6	60.3	51.4
February	23.8	85.4	68.3
March	21.1	56.6	47.0
April	26.5	64.2	54.2
May	31.1	64.7	56.1
June	38.8	67.0	60.3
July	35.7	70.0	61.4
August	36.9	70.9	62.4
September	38.9	72.6	64.3
October	42.1	73.8	66.2
November	47.3	74.2	68.0
December	29.5	69.6	59.2

A combination of the returns for the two classes of workmen shows the extent to which there was employment on highway construction and maintenance in general. A chart,[1] showing the trends of employment in each of the three classes mentioned, during the period September, 1931, to December, 1933, appears in the appendix.

Public Utilities. — The monthly survey of employment by public utility companies was first undertaken in January, 1929. During the past two years the list of companies reporting has been virtually identical, and about the only changes were in the nature of mergers or consolidations, which reduced the number of companies without changing the coverage. All employees, both manual and clerical (except salaried executives) on the pay rolls of these companies in Massachusetts are included in the reports. In December, 1933, reports were received from 131 companies, which together employed a total of 45,199 wage-earners. These 131 companies comprised six steam railroads, 14 street and electric railways, 25 passenger bus companies, and 86 gas and electric companies. It is estimated that these companies employ approximately 95 per cent of the total number of wage-earners on the pay rolls of all public utility companies in Massachusetts within the four classifications specified. Each of the three steam railroad companies engaged in interstate transporation furnishes pay roll data covering its operations within Massachusetts.

Two series of index numbers are presented in Table 13, one of which relates to employment, and the other to the total amount paid in wages to employees in each of the four classes of public utility companies, based on the respective averages for the year 1930 taken as 100.0. A chart,[2] showing graphically, by months, the trends of employment and of total amount of wages paid by these public utility companies during the four years, 1930 to 1933, inclusive, appears in the appendix.

[1] See Appendix, page 92, Plate 13.
[2] See Appendix, page 93, Plate 14.

Table 13. — Index Numbers of Employment of Wage-earners and of Amount Paid in Wages by Public Utility Companies in Massachusetts: 1930, 1931, 1932, and by Months in 1933

(Average for Year 1930 = 100.0)

Years and Months	All Classes Combined	Steam Railroads	Street and Electric Railways	Passenger Bus Companies	Gas and Electric Companies
Employment					
Average, 1930	100.0	100.0	100.0	100.0	100.0
Average, 1931	91.4	86.5	96.7	100.4	96.1
Average, 1932	81.6	74.4	90.2	95.5	88.5
Average, 1933	77.6	71.5	81.2	101.2	85.2
1933					
January	78.2	72.2	82.9	93.5	85.2
February	78.6	73.0	83.3	93.0	84.9
March	76.9	70.4	82.0	91.5	84.7
April	76.5	69.8	81.6	95.4	84.4
May	76.2	69.7	80.9	98.1	83.7
June	76.5	70.1	80.8	101.7	83.7
July	77.0	70.9	80.7	104.9	84.0
August	77.5	71.6	80.6	107.5	84.2
September	78.7	73.0	80.8	107.8	85.9
October	79.0	73.1	80.4	106.9	87.3
November	78.5	71.9	80.6	107.5	87.5
December	78.1	71.7	79.6	106.8	87.4
Amount Paid in Wages					
Average, 1930	100.0	100.0	100.0	100.0	100.0
Average, 1931	89.5	83.7	95.3	99.2	94.4
Average, 1932	73.7	63.4	83.6	85.3	82.8
Average, 1933	66.1	58.9	69.3	85.1	74.5
1933					
January	66.3	58.9	70.4	79.7	74.8
February	68.2	61.9	72.9	80.7	74.1
March	64.7	56.4	70.0	76.4	73.7
April	64.4	55.4	69.3	83.0	74.4
May	64.0	55.7	68.9	83.7	72.5
June	64.9	57.1	68.1	85.8	73.8
July	65.8	59.0	68.0	88.6	73.7
August	66.0	59.4	67.9	92.2	73.7
September	67.7	62.2	68.2	90.3	75.0
October	67.5	61.3	68.8	87.4	75.6
November	66.5	58.8	69.3	87.1	75.9
December	67.5	60.6	69.5	86.2	76.2

According to the index numbers representing employment in all four classes of public utilities combined, there was a decrease of 4.9 per cent in 1933 in the average number employed, when compared with the average number employed in 1932. The changes from month to month were relatively small, and the difference between the lowest index number (76.2) in May, and the highest (79.0) in October, was only 2.8 points, or 3.5 per cent.

The number of wage-earners employed by the steam railroad companies constitutes about one-half of the total number employed by all four classes of public utility companies reporting, and has considerable weight in determining the trend of employment and earnings of wage-earners in the four classes combined. The month to month changes in this group were small, and the average for the year was 3.9 per cent below the average for the year 1932.

The street and electric railway employees were more seriously affected by unemployment in 1933 than were the employees of the steam railroads or the gas and electric companies. The index number (81.2) for the year 1933 was 10.0 per cent less than the index number (90.2) for the year 1932. This was not due to any marked changes in 1933, but to the continuance of the low level of employment during the latter part of 1932.

The passenger bus companies in 1933 increased their forces considerably, and the index number (101.2) for the year exceeded by 6.0 per cent the corresponding index number (95.5) for 1932. Seasonal fluctuations are indicated by decreases in the first three months, and large increases beginning in April and continuing through the remainder of the year. Employment during the last seven months of the year was at a high level, and no seasonal decreases occurred at the close of the year.

The number of wage-earners employed by the gas and electric companies in 1933 changed but little from month to month. The index number (85.2) for the year 1933 was 3.7 per cent below the index number (88.5) for the year 1932.

In discussing the trend of wages paid by the several classes of public utility companies, attention should be called to the fact that during the latter part of 1932 many reductions in wage rates became effective. Consequently, the amounts paid in wages during the closing months of that year were much less than the averages for the year in each of the groups except the group of passenger bus companies, in which there was little change. The low levels reached at the close of 1932 continued through 1933 with even further reductions, in some instances, in the total payments because of short-time employment.

Municipal Employment. — Beginning with April, 1931, reports relative to employment by municipalities in the Commonwealth have been received each month. These reports cover mechanics, workmen, laborers, and other municipal employees who receive their pay weekly, in accordance with the provisions of the General Laws, Chapter 149, Section 148. Each city and town reports by departments. In order to show the strong seasonal tendencies and the extent to which road construction work by municipalities has served to relieve unemployment, the pay rolls for manual workers in street, highway, and public works departments are tabulated separately from the pay rolls for workers in other departments. Pay roll data relative to police, fire, and school departments, and hospitals maintained by public funds are not included in this survey.

For more than two years reports have been received each month from nearly 100 municipalities, comprising over 80 per cent of the population of the State. In those cities and towns from which no reports are obtained, there is a comparatively small number of municipal employees, and their inclusion would not add sufficiently to the value of the survey to warrant their being canvassed each month.

Two series of index numbers are presented in Table 14, one of which relates to employment of municipal employees and the other to the total amount paid them in wages for one week in each month beginning with September, 1931, the returns for which month have been taken as the base, 100.0, in computing the index numbers. A chart,[1] showing the trend of employment and of amount paid in wages in the municipalities, by classes of employment during the entire period covered, appears in the appendix.

On reference to the index numbers in Table 14, it will be noted that there were seasonal fluctuations in employment in each of the classes of work. In February, 1933, the number of workers employed (with the exception of clerical and other non-manual employees) greatly exceeded the corresponding number employed in January and March, 1933. This was due almost wholly to the employment of special temporary workmen on snow and ice removal in February. There was also some increase in employment in all classes of work during the summer and fall months. For the year 1933, as a whole, there was a reduction in the number of municipal employees as compared with the number employed in 1932, and this was also true of the total amount paid in wages to such employees. Evidently this was necessary because of reductions in municipal appropriations for highway and other construction work in 1933.

Agriculture. — The number of persons employed in agriculture in Massachusetts constitutes only slightly over three per cent of the total number of persons gainfully employed in all industries in the State; nevertheless, an endeavor has been made to secure monthly reports from a representative list of employers of agricultural labor. It has not been possible to secure an adequate representation, because the number of farms, market gardens, dairies, etc., in connection with which three or more persons are employed, is very small, and it is not feasible to attempt to secure a large number of reports each month from one-man or two-man farms. A few persons, usually the members of the family on a farm, can care for a large acreage, except during the planting and harvesting seasons, when some temporary help is employed. Quite frequently farmers in a district co-operate during the busy seasons, aiding each other when an emergency arises.

The list of reporting agencies now includes 100 employers of agricultural labor, consisting of 21 farms and market gardens, 27 dairies and stock farms, 34 nurseries,

[1] See Appendix, page 94, Plate 15.

Table 14. — Index Numbers of Employment and of Amount Paid in Wages in Municipalities: By Specified Classes of Employment, September, 1931–December, 1933

(Base — September, 1931 = 100.0)

Years and Months	Manual Workers			Clerical and other Non-manual Employees paid Weekly	Total — All Classes Specified
	Street, Highway, and Public Works Departments	Other Departments	Total, All Departments		
Employment					
1931					
September	100.0	100.0	100.0	100.0	100.0
October	100.8	103.0	101.6	100.7	101.4
November	92.6	100.8	95.5	98.8	95.9
December	83.8	106.9	91.8	93.9	92.1
1932					
January	85.4	98.2	89.8	102.3	91.8
February	82.7	96.6	87.5	97.1	89.0
March	71.2	94.1	79.0	98.6	82.0
April	74.5	101.3	83.7	100.6	86.3
May	72.9	111.7	86.1	100.8	88.4
June	79.0	110.8	89.9	99.4	91.4
July	80.6	116.3	92.8	104.4	94.6
August	76.6	122.3	92.2	104.7	94.1
September	74.6	116.4	88.9	98.2	90.3
October	68.4	114.1	84.0	99.5	86.3
November	66.6	111.0	81.8	101.4	84.7
December	70.2	104.0	81.8	100.9	84.6
1933					
January	60.3	95.3	72.3	99.2	76.2
February	85.4	100.5	90.7	99.3	91.8
March	56.6	82.7	65.6	99.3	70.5
April	64.2	84.4	71.2	103.4	75.9
May	64.7	94.8	75.0	104.2	79.3
June	67.0	98.9	77.9	105.2	81.8
July	70.0	96.9	79.2	110.2	83.7
August	70.9	98.2	80.2	108.9	84.4
September	72.6	98.2	81.4	107.3	85.1
October	73.8	95.1	81.2	106.6	84.8
November	74.2	98.4	82.5	105.1	85.7
December	69.6	84.8	74.8	104.0	79.0
Amount Paid in Wages					
1931					
September	100.0	100.0	100.0	100.0	100.0
October	94.3	93.8	94.1	102.7	95.5
November	89.7	93.4	90.9	100.5	92.4
December	84.0	102.6	90.4	91.6	90.7
1932					
January	81.4	89.8	84.2	102.9	87.2
February	75.7	83.7	78.4	99.2	81.7
March	69.6	81.8	73.8	100.1	77.9
April	72.0	85.4	76.6	102.7	80.6
May	71.7	95.4	80.0	101.9	83.3
June	74.4	92.0	80.5	100.9	83.6
July	75.0	95.9	82.3	103.7	85.5
August	71.8	96.5	80.4	105.2	84.1
September	69.1	92.1	77.0	100.0	80.5
October	62.4	88.0	71.2	100.1	75.5
November	61.7	86.1	70.1	103.0	75.0
December	64.7	82.5	70.7	102.3	75.5
1933					
January	56.7	77.6	63.8	99.8	69.2
February	67.8	76.0	70.4	100.0	74.9
March	51.2	70.4	57.7	99.7	63.9
April	54.5	71.6	60.2	103.0	66.5
May	53.8	76.3	61.4	99.3	67.0
June	54.9	80.2	63.5	98.1	68.7
July	58.0	79.2	65.1	100.8	70.5
August	58.1	82.5	66.3	101.2	71.6
September	58.4	78.1	65.5	99.9	70.7
October	59.7	75.9	65.6	99.3	70.7
November	60.5	77.5	66.7	97.8	71.5
December	58.9	73.1	64.1	97.6	69.2

wholesale florists, and landscape gardens, nine fruit growers, eight cranberry growers, and one leaf-tobacco grower. In 1913 the maximum number of persons was employed in October, which is the harvest season for many crops. The pay roll reports received do not include salaries or wages of owners, partners, tenants, managers, or overseers.

Index numbers of employment of agricultural labor, by months, in 1932 and 1933, follow:

	1932	1933		1932	1933
January	38.1	33.8	July	74.9	65.8
February	36.2	32.8	August	71.5	64.4
March	38.3	34.1	September	119.1	84.3
April	61.5	53.8	October	110.9	92.7
May	82.2	67.3	November	62.8	56.1
June	74.1	68.8	December	49.7	42.6

It will be observed that in the winter months employment was at its lowest point. There was a decided improvement in April and May, with employment continuing at about the May level throughout the summer of 1933. In September the number employed increased greatly, and in October employment was somewhat better than in September. A sharp decline was noted in November, and there was a further decrease in employment in December. These seasonal trends resulted from a combination of factors. In each of the four principal classes of agricultural employment, additional workmen were employed during the spring months. At the dairies, on stock farms and market gardens there was an increase in employment during the summer months. In cranberry growing, additional men were required for preparatory work on the bogs in the spring and the harvesting sorting and packing of the cranberries during the fall months furnished work for additional employees, both men and women.

Office and Miscellaneous Employment. — In order that the monthly surveys might be more fully representative of all important classes of employment in the State, a number of somewhat unrelated classes, not previously canvassed, were added to the list in 1931. During the past year there has been little change in the number of employees in this group, and reports have been received from nearly 700 employers, representing over 900 companies, establishments, or "units," which furnish employment to approximately 30,500 wage-earners.

For eight of these classes or subdivisions, monthly index numbers of employment during the period September, 1931, to December, 1933, are presented in Table 15, and a chart,[1] showing, graphically, the trend of employment during the same period, appears in the appendix. The number of persons employed in September, 1931, was taken as the base (100.0) in computing the index numbers in each of the series.

Table 15. — Index Numbers of Employment in Eight Miscellaneous Classes of Employment. By Months; September, 1931–December, 1933

(Base — September, 1931 = 100.0)

Years and Months	Banks and Trust Companies	Insurance Companies and Agencies	Hotels	Laundries	Hospitals	Schools and Colleges	Amusement and Recreation Places	Trucking and Handling
1931								
September	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
October	101.2	99.5	101.6	101.7	99.6	121.3	101.2	97.9
November	100.1	100.3	101.1	100.2	99.7	121.5	101.5	96.8
December	95.3	100.4	98.8	98.7	101.0	120.0	100.5	98.9
1932								
January	95.2	99.6	96.2	95.3	99.3	118.1	96.5	89.7
February	94.9	99.8	95.5	94.6	99.3	116.7	88.9	90.8
March	94.7	99.9	95.0	94.2	99.0	117.1	81.5	88.3
April	94.2	100.1	94.4	94.1	99.4	117.1	88.3	89.1
May	94.1	100.0	93.2	93.7	99.4	117.5	73.6	81.0
June	94.0	99.6	95.8	97.5	99.3	102.7	69.3	77.8
July	94.1	100.3	94.1	95.9	101.6	45.0	66.7	74.4
August	94.0	100.3	91.0	94.6	100.9	40.7	66.6	73.2
September	93.1	99.4	85.1	96.9	99.0	89.8	71.2	73.2
October	92.2	99.5	84.3	97.3	97.4	100.6	72.2	86.3
November	91.6	99.8	84.8	96.6	98.7	100.4	71.3	78.8
December	91.4	99.6	84.0	96.3	98.5	96.0	63.0	77.6
1933								
January	91.2	99.7	82.6	94.3	98.4	96.3	57.5	82.4
February	90.7	99.8	82.4	95.3	98.1	95.1	55.8	78.2
March	89.2	99.7	81.2	93.8	96.1	95.0	55.2	73.0
April	87.2	99.7	79.7	93.8	95.8	95.5	55.0	77.2
May	86.9	100.5	81.0	93.5	96.9	95.5	54.8	86.2
June	84.0	99.9	81.2	95.3	98.0	89.2	54.4	82.2
July	85.1	99.1	78.4	94.5	100.3	42.1	52.2	88.9
August	86.1	99.2	76.9	94.5	100.9	37.3	52.2	89.5
September	85.8	100.2	78.1	93.4	98.8	58.7	53.6	87.7
October	85.9	102.3	72.8	93.6	96.2	94.5	55.9	98.5
November	86.6	102.3	73.7	92.9	97.5	94.8	57.7	92.0
December	86.5	102.4	77.0	91.8	98.1	94.5	56.2	86.3

[1] See Appendix, page 95, Plate 16.

In the *banks and trust companies* the month to month changes were almost negligible. The average of the index numbers of employment for the months in 1933 was somewhat less than the average for 1932. The *insurance companies* maintained an almost uniform force of employees during the entire period, with slightly greater employment towards the close of the year.

In *hotels* the general trend of employment was slightly downward. The opening of summer hotels failed to add to any great extent to the number employed. The *laundries* showed no appreciable change in employment during the entire year 1933. The same was true of employment in *hospitals*, the reports for which include "institutional employees," such as nurses in training, orderlies, building employees, and laborers about the grounds, but do not include professional employees who are paid on an annual salary basis, attendants, and consulting physicians.

In *schools and colleges* those covered by the reports include the office staff and employees in the buildings and about the grounds, but do not include the teaching staff. Employment of such "institutional employees" fluctuated greatly at the beginning and ending of the school year. The numbers employed in July, August, and September in 1933 were decidedly less than in any other months of the year. In the fall of 1933 the institutions re-employed virtually the same number as before the vacation season.

Little change occurred in *amusement and recreation places* in 1933. The *trucking and handling companies* employed a large number of manual workers, who were paid only for time actually worked. The amount of work available varied considerably from week to week during the year. Employment was at a somewhat higher level during the latter months of the year, more particularly in October.

In certain of the classes of employment above considered, salaries are paid on a monthly or semi-monthly basis, and, in some establishments, such as hotels and hospitals, the employees receive board and lodging in addition to cash compensation for services. In order that the data may be comparable with data secured in connection with other surveys, all salaries reported on other than a weekly basis have been reduced to their weekly equivalent, and any additional compensation in the form of subsistence has been excluded from consideration in computing the pay rolls. No index numbers relative to the amount of compensation have been computed, but information of this nature in some detail appears in the press announcements issued each month.

Building Statistics. — The collection of records of building permits granted in municipalities in Massachusetts was first undertaken in 1919, and quarterly reports were then received from 36 cities. The number of municipalities reporting has since been increased to 55 [1] (including all of the 39 cities and 16 of the larger towns). During a period of seven years, 1927 to 1933, monthly reports have been received from these 55 municipalities, and the records cover approximately 90 per cent of the building operations in the State, exclusive of State and Federal buildings, the permits for which are not included in the records of municipalities.

The questionnaire used calls for the number of applications filed for permits to build, the value represented thereby, classified by type of structure and intended use, and the number of family accommodations to be provided, classified by type of residence. Mimeographed summaries of the returns are issued each month immediately following the month to which these statistics relate.

The estimated cost of prospective building in the 55 municipalities for each of the seven years 1927–1933, inclusive, are presented in Table 16. The total number of buildings for all classes of projects in 1933 was less by 7.5 per cent than in 1932,

[1] A list of the 55 cities and towns covered by this monthly survey follows:

39 Cities

Attleboro	Fall River	Lowell	Newton	Somerville
Beverly	Fitchburg	Lynn	North Adams	Springfield
Boston	Gardner	Malden	Northampton	Taunton
Brockton	Gloucester	Marlborough	Peabody	Waltham
Cambridge	Haverhill	Medford	Pittsfield	Westfield
Chelsea	Holyoke	Melrose	Quincy	Woburn
Chicopee	Lawrence	New Bedford	Revere	Worcester
Everett	Leominster	Newburyport	Salem	

16 Towns

Arlington	Brookline	Milton	Plymouth	Wellesley
Belmont	Dedham	Needham	Saugus	West Springfield
Braintree	Framingham	Norwood	Watertown	Winchester
				Winthrop

and the value was less by 22.7 per cent. For each of the three classes of projects the respective decreases in number and value were: new residential building, number, 1.1 per cent, and value, 2.9 per cent; new non-residential building, 18.4 per cent, and 52.2 per cent; and additions, alterations, and repairs, 4.4 per cent, and 8.5 per cent. It will thus be seen that although new residential construction held up well, there was a marked decline in the amount of the new non-residential building in 1933, and also somewhat less repair work.

Table 16. — Number and Estimated Cost of Buildings in 55 Municipalities in Massachusetts, 1927–1933: By Classes of Projects [1]

Number and Cost and Years	New Residential Building	New Non-residential Building	Additions, Alterations, and Repairs	Totals — All Classes of Projects
		Number of Buildings		
1933	1,786	4,188	13,495	19,469
1932	1,806	5,134	14,115	21,055
1931	4,587	8,392	16,210	29,189
1930	4,931	9,615	16,417	30,963
1929	6,759	12,039	17,607	36,405
1928	10,580	12,967	17,184	40,731
1927	11,418	14,231	18,666	44,315
		Estimated Cost		
1933	$9,513,475	$5,646,159	$9,859,614	$25,019,248
1932	9,797,266	11,800,136	10,771,930	32,369,332
1931	32,956,935	38,495,601	14,240,473	85,693,009
1930	40,146,313	45,173,157	22,033,838	107,353,308
1929	69,936,017	53,945,280	29,774,203	153,655,500
1928	96,878,609	52,047,563	22,122,372	171,048,544
1927	101,959,226	51,765,595	27,574,615	181,299,436

[1] Annual summaries of the data in detail for the individual municipalities have been issued in mimeographed form.

Comparisons with years prior to 1932 show very clearly the decline in recent years in the construction industry in Massachusetts, particularly new construction. For example, — the number of new residential buildings planned in 1933 was 1,786, as compared with 11,418 in 1927; the corresponding values were $9,513,475 and $101,959,226. The number of new non-residential buildings was 4,188 in 1933, and 14,231 in 1927; the corresponding values were $5,646,159 and $51,765,595.

Of the 1,786 dwellings planned in 1933, 1,708, or 95.6 per cent, were one-family dwellings, and 58, or 3.3 per cent, were two-family dwellings. The remaining 1.1 per cent comprised four multi-family dwellings, four dwellings and stores combined, and 12 non-housekeeping dwellings. In recent years there has been a very marked decline in the number of multi-family houses erected in the 55 municipalities, from a maximum of 917 dwellings, providing 6,051 family accommodations in 1927, to four dwellings, providing 15 family accommodations in 1933.

Of the estimated cost of all kinds of dwellings ($9,513,475), $8,962,000, or 94.2 per cent, represented one-family dwellings; $364,800, or 3.8 per cent, represented two-family dwellings; $91,675, or 1.0 per cent, represented non-housekeeping dwellings; $70,500, or 0.7 per cent, dwellings and stores combined; and the remaining $24,500 or 0.3 per cent, multi-family dwellings.

In Table 17 data are presented, showing, by classes of structures, the number of new residential buildings for which permits to build were granted, the estimated cost of such buildings, and the number of family accommodations to be provided in the several different classes of dwellings; and for non-residential buildings, the number of buildings to be erected, the estimated cost of such buildings, and the number and estimated cost of additions, alterations, and repairs.

Of the 1,862 family accommodations provided, 1,708, or 91.7 per cent, were in one-family houses; 116, or 6.2 per cent, were in two-family houses; 15, or 0.8 per cent, were in multi-family houses; and the remaining 23 were in dwellings and stores combined. It will be noted that only 12 non-housekeeping dwellings were planned, at an estimated cost of $91,675.

In the 55 municipalities combined the total number of buildings planned in 1933 was 4,188, and the value represented by all classes of structures was $5,646,159. The seven outstanding groups were: five institutional buildings, to cost $889,937; 2,599 private garages, $866,236; nine public buildings, including libraries and museums, $618,183; 87 factories, bakeries, ice plants, greenhouses, laundries, and other workshops, $548,165; 169 stores, restaurants, and other mercantile estab-

lishments, $466,410; 60 amusement and recreation places (including club buildings without bedrooms), $445,117; and 120 storage warehouses, coal pockets, lumber sheds, etc., $421,685. These seven groups together represented $4,255,733, or 73.6 per cent, of the total cost of new non-residential buildings reported in the group of 55 municipalities.

The estimated cost of additions, alterations, and repairs in 1933, represented by 13,495 permits, amounted to $9,859,614. Of this total value, nearly two million dollars was represented by eight large individual projects coming under this classification.

Table 17. — Summary of Prospective Building in 55 Municipalities in Massachusetts during the Year 1933: By Classes of Structures

1 — New Residential Buildings

Classes of Structures	Number of Buildings	Estimated Cost	Number of Family Accommodations
Housekeeping dwellings:			
One-family dwellings	1,708	$8,962,000	1,708
Two-family dwellings	58	364,800	116
One-family and two-family dwellings with stores or shops therewith	3	20,500	3
Multi-family dwellings (three or more families)	4	24,500	15
Multi-family dwellings with stores or shops therewith	1	50,000	20
Non-housekeeping dwellings:			
Bachelor apartments, dormitories, club and association buildings with bedrooms	6	44,175	–
Hotels	–	–	–
Lodging houses and other non-housekeeping dwellings	6	47,500	–
Total — New residential buildings	*1,786*	*$9,513,475*	*1,862*

2 — New Non-Residential Buildings, and Additions, Alterations, and Repairs

Classes of Structures	Number of Buildings	Estimated Cost	Rank on Basis of Cost
New non-residential buildings:			
Amusement and recreation places (including club buildings without bedrooms)	60	$445,117	6
Churches, chapels and parish houses	8	304,000	9
Factories, bakeries, ice-plants, greenhouses, laundries, and other workshops	87	548,165	4
Garages, public	24	78,500	13
Garages, private	2,599	866,236	2
Gasoline and service stations	167	340,535	8
Institutional buildings	5	889,937	1
Office buildings, including banks	35	127,036	12
Public buildings, including libraries and museums	9	618,183	3
Public works and utilities	13	259,725	10
Schools, grade and high (public and private)	3	22,300	14
Sheds, poultry houses, and other minor outbuildings	822	235,787	11
Storage warehouses, coal pockets, lumber sheds, etc.	120	421,685	7
Stores, restaurants, and other mercantile buildings	169	466,410	5
All other non-residential buildings	67	22,543	–
Totals — New non-residential buildings	*4,188*	*$5,646,159*	–
Additions, alterations, and repairs	*13,495*	*$9,859,614*	–

Information Service

During the past year the number of inquiries relative to labor and industrial matters received in this Division has increased greatly. A considerable part of the additional work since May, 1933, has resulted from the demand for information for use in the formulation of industrial codes.

The reference library, maintained primarily for the use of the officials of the Department, is also used extensively by the general public. Reference material is so arranged that it is readily accessible. A librarian and two assistants devote full time to this work and assist in answering inquiries addressed to the Department.

The library now comprises 3,550 bound volumes of official and unofficial reports and reference books, and numerous pamphlets, and mimeographed reports on industrial subjects. There are received currently 13 daily newspapers, 28 quarterlies, 188 monthlies, 31 weeklies and 6 semi-monthly publications, the most of which are contributed on an exchange basis by Federal and State Labor Departments, trade unions, and private industrial research organizations.

Material bearing on the work of the Department is clipped from periodicals, pamphlets, reports and newspapers as received, or is indexed for future reference. Clippings are distributed daily among the members of the staff, who are thus advised as to industrial developments and conditions in the respective fields to which their work relates. "Scrap books" containing articles and clippings on various topics are prepared, and are of much assistance to the departmental officials in answering inquiries relative to industrial matters of current interest.

The work of the library has materially increased as a result of numerous requests for information relative to the National Recovery Administration, the N. R. A. codes, emergency relief and related matters, rendering it necessary to assign an additional clerk to the library personnel. Other subjects of inquiry which were of special interest were: employment and unemployment, labor controversies, building operations, hazardous occupations, safety regulations and codes, stabilization of employment, State publicity, collective bargaining, cost of living, uniform labor legislation, business outlook, laws relative to women and minors in industry, workmen's compensation, directories of industrial establishments, resources of small communities, returns of the Federal Census of 1930, history of trade unions, wages and incomes, and use of leisure time.

Since the abolition of the Massachusetts Industrial and Development Commission, many requests for information relative to the industries and business opportunities in Massachusetts formerly answered by that Commission have been referred to the library for attention.

Statistics of Manufactures — 1932

Introductory. — The census of manufactures for the year 1932 was taken by the Division of Statistics during the year 1933. For some years prior to 1930, when the effects of the present industrial depression became evident, reports were received from nearly 10,000 manufacturing concerns each year, but the number of manufacturing establishments in operation in 1932 was reduced to 8,778 and during the year 1932 somewhat over 450 manufacturing establishments in this State definitely went out of business and a large number of others reported that the value of the products for the year was less than $5,000, and, in accordance with the regulations relative to reporting, were not required to furnish a report.

The total number of manufacturing establishments in operation during the year 1932 was 8,778, exclusive of those in which the value of products manufactured during the year was $5,000. The total value of the products manufactured in the 8,778 establishments was $1,521,752,939; the cost of stock and materials used in manufacture was $718,347,675; and the difference between these amounts ($803,405,264) represents the *value added* by the various manufacturing processes. The average number of wage-earners employed during the year was 350,521, or 19.3 per cent less than the corresponding number (434,441) employed during the year 1931.

The total amount paid in wages during the year was $334,358,550, which was less by $139,830,652, or 29.5 per cent, than the amount paid in wages ($474,189,202) during the year 1931. This large decrease in the wage fund distributed was due not only to the decrease in the number of persons employed but also in considerable measure to a reduction in the earnings of those who were actually employed, and accordingly the percentage reduction (29.5) in the amount of wages paid was greater than the percentage reduction (19.3) in the average number of wage earners employed.

Comparisons of the totals for 1932 with those for 1931 show that there were very large decreases in each of the following items: Average number of wage earners employed, 19.3; value of stock and materials used, 29.2; value of products, 29.5 and value added by manufacture, 29.7.

The capital invested in the manufacturing industries in Massachusetts in 1932 was reported as $1,888,244,721, as compared with the corresponding amount ($2,483,589,920) in 1930, showing a decrease in capital invested of $595,345,199, or 24.0 per cent.

The value of goods exported from manufacturing establishments in Massachusetts in 1932 was reported as $29,097,406, as compared with $79,511,515 in 1930, a decrease of $50,414,109, or 63.4 per cent.

On the questionnaire used in 1931 information with reference to capital invested and value of goods exported was not called for and comparisons of these items in 1932 are therefore made with the corresponding items in 1930, instead of 1931.

In order to make public as early as possible the census data for municipalities and the principal industries therein, preliminary tabulations were made and the results were issued in the form of press notices.[1]

[1] This series of press notices included the following:
Nos. 1–39. *Individual Cities.* A separate press notice for each of the 39 cities containing data, by principal industries, for 1932, with comparable data for specified industries for certain prior years.
No. 40. *Summary by Cities.* Totals only for each city, 1932.
No. 41. *General Summary for the State.* Principal data by years, 1915–1932.
No. 42. *Summary by Towns.* Totals only for each town, 1932.
No. 43. *Metropolitan Boston.* Principal data by municipalities, 1932.
No. 44. *Summary for the State by Industries.* Principal data for leading industries, 1932, with comparable data for the years 1920–1932.
No. 45. *Metropolitan Boston.* Principal data by industries, 1932, with comparable data for the years 1922–1932.
Nos. 46–53. *Leading Towns.* A separate press notice for each of the following important industrial towns: Adams, Athol, Easthampton, Framingham, Northbridge, Norwood, Watertown, and West Springfield.

Summary of Principal Data, 1913–1932

All Industries, Combined. — In order to show the general industrial trends in Massachusetts for a series of years, the principal data for all manufacturing industries combined, for the years 1913 to 1932, inclusive, are presented in Table 18. In making comparisons for the several years of the money values presented in this summary, due allowance should be made for price fluctuations from year to year. The *values* of products manufactured do not necessarily represent the relative *volume* of goods produced in the several years.

A chart showing, graphically, the trends of employment, earnings, and real wages of wage-earners in the manufacturing industries and the cost of living in Massachusetts by years, 1913 to 1933,[1] inclusive, appears on page 39, and these trends have been discussed in the text on pages 37 to 40.

[1] For the year 1933 estimates were prepared, based on data obtained in connection with the "Monthly Surveys of Employment and Earnings in *Representative* Manufacturing Establishments." (See Table 1 on page 38).

Table 18. — Principal Data Relative to Manufactures in Massachusetts, All Industries Combined, 1913–1932, Inclusive

Years	Number of Establishments	Capital Invested	Value of Stock and Materials Used	Amount of Wages paid during the Year	Average Number of Wage-earners Employed	Value of Products	Value Added by Manufacture
1913	8,405	$1,345,461,875	$961,778,476	$351,299,706	616,927	$1,658,728,363	$696,949,887
1914	12,013[1]	1,548,960,733	931,383,793	341,309,517	606,698	1,641,373,047	709,989,254
1915	9,707	1,550,080,995	959,662,457	346,243,472	596,348	1,692,445,366	732,782,909
1916	9,829	1,791,050,092	1,354,433,202	447,957,731	682,621	2,349,933,003	995,499,801
1917	9,865	2,239,848,630	1,782,440,354	537,144,629	708,421	3,020,557,545	1,238,117,191
1918	9,695	2,510,730,295	2,249,822,722	679,401,273	719,210	3,851,346,215	1,601,523,493
1919	11,906[1]	2,962,108,527	2,260,713,036	766,623,337	713,836	4,011,181,532	1,750,468,496
1920	10,262	2,987,620,867	2,489,237,446	891,176,822	695,832	4,370,276,822	1,881,039,376
1921	9,994[1]	[2]	1,441,035,230	641,360,936	579,071	2,849,413,516	1,408,378,286
1922	10,056	2,822,014,756	1,512,510,105	678,073,968	612,682	3,002,625,958	1,490,115,853
1923	10,519[1]	[2]	1,835,218,349	799,363,111	667,443	3,570,543,265	1,735,324,916
1924	10,174	2,853,590,206	1,629,342,134	711,812,104	589,364	3,126,137,145	1,496,795,011
1925	10,027[1]	[2]	1,794,643,051	716,155,593	591,438	3,426,617,326	1,631,974,275
1926	9,903	2,819,189,700	1,790,611,294	738,208,510	602,343	3,419,814,877	1,629,203,583
1927	10,037[1]	[2]	1,678,812,411	705,929,549	578,068	3,317,851,888	1,639,039,477
1928	9,971	2,735,070,138	1,663,155,564	670,063,291	540,927	3,224,227,651	1,561,072,087
1929	9,872[1]	[2]	1,681,432,788	694,805,312	557,494	3,392,162,237	1,710,729,449
1930	9,586	2,483,589,920	1,333,317,227	573,838,044	481,449	2,676,387,256	1,343,070,029
1931	9,305[1]	[2]	1,015,093,739	474,189,202	434,441	2,157,450,449	1,142,356,710
1932	8,778	1,888,244,721	718,347,675	334,358,550	350,521	1,521,752,939	803,405,264

[1] The Census Manufactures for the years 1914, 1919, 1921, 1923, 1925, 1927, 1929, and 1931 included certain establishments not canvassed in the other years, but these establishments added relatively little to the other items specified.
[2] Not called for on the questionnaire.

Cities. — Principal data having reference to manufactures in each of the 39 cities of the Commonwealth, with totals for the State and for the 316 towns grouped together, are presented in Table 19.

The total value of products manufactured in the 39 cities in 1932 ($1,199,940,025) constituted 78.8 per cent of the aggregate value ($1,521,752,939) of all products manufactured in the Commonwealth in that year, and the average number of wage-earners (265,966) employed in the manufacturing industries in the 39 cities constituted approximately 76 per cent of the average number of wage-earners (350,521) employed in all manufacturing establishments in the State. The total population of the 39 cities (as of April 1, 1930) was 2,940,335, constituting 69.2 per cent of the aggregate population (4,249,614) of the State in that year.

As a manufacturing center, Boston ranked first among the cities of the Commonwealth, and the value of the products manufactured in the city in 1932 was $298,032,533, constituting approximately 20 per cent of the aggregate value of all products manufactured in the entire State during the year. In order of importance, based on the value of products manufactured in 1932, the twelve leading cities were: Boston, Cambridge, Worcester, Lawrence, Springfield, Everett, Somerville, Lynn, Fall River, New Bedford, Lowell and Brockton.

Table 19. — Principal Data Relative to Manufactures in the 39 Cities in Massachusetts in 1932

Cities	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
The State	**8,778**	**$718,347,675**	**$334,358,550**	**350,521**	**$1,521,752,939**
39 Cities	*7,093*	*560,525,113*	*256,468,116*	*265,966*	*1,199,940,025*
Attleboro	115	5,532,834	3,478,290	3,388	12,870,416
Beverly	40	1,698,374	3,448,045	2,907	7,120,071
Boston	2,284	144,649,486	52,972,079	46,037	298,032,533
Brockton	230	14,485,994	7,670,670	7,989	31,892,459
Cambridge	359	33,909,977	13,662,429	13,875	98,485,092
Chelsea	110	5,996,498	3,810,668	3,803	13,599,045
Chicopee	45	10,922,213	5,229,578	5,029	24,981,954
Everett	109	28,574,384	5,969,823	4,510	50,598,449
Fall River	236	24,598,084	11,941,433	17,326	46,006,042
Fitchburg	91	9,056,752	3,667,541	4,256	16,830,165
Gardner	72	4,384,875	3,002,285	3,299	10,900,448
Gloucester	67	3,782,968	1,444,794	1,544	7,332,770
Haverhill	281	12,133,283	6,135,905	7,119	25,486,837
Holyoke	139	13,710,437	7,653,528	8,465	29,007,084
Lawrence	160	26,815,511	13,148,958	17,239	51,636,495
Leominster	63	3,655,960	2,546,135	3,272	9,569,894
Lowell	209	17,584,610	9,730,171	12,012	35,446,140
Lynn	333	19,738,591	11,709,525	12,630	50,081,533
Malden	102	6,605,556	2,387,905	2,463	15,775,018
Marlborough	26	2,221,189	1,529,021	1,962	4,992,637
Medford	56	2,529,891	956,337	875	4,816,361
Melrose	20	375,308	246,499	212	886,700
New Bedford	199	17,497,280	12,190,694	16,456	39,151,295
Newburyport	39	2,481,628	1,591,587	1,880	5,297,057
Newton	55	3,914,278	1,584,278	1,661	8,736,303
North Adams	41	7,021,931	2,847,012	3,222	12,094,559
Northampton	44	1,654,820	1,607,503	1,697	5,415,499
Peabody	72	8,738,909	5,125,270	4,835	18,824,064
Pittsfield	59	7,370,805	4,090,330	4,738	19,078,178
Quincy	139	7,555,128	7,350,610	4,897	19,192,057
Revere	20	249,589	161,889	151	598,783
Salem	106	7,469,965	4,165,968	4,518	18,416,612
Somerville	140	35,964,326	6,213,558	5,317	50,212,222
Springfield	290	19,553,199	12,041,216	11,211	51,024,815
Taunton	85	5,366,731	2,950,366	3,487	11,325,920
Waltham	68	2,393,868	2,131,649	2,130	7,652,732
Westfield	50	2,069,017	1,089,985	1,221	4,460,035
Woburn	48	3,037,147	1,461,650	1,327	6,566,043
Worcester	491	35,223,717	17,522,932	17,006	75,545,708
316 Towns	*1,685*	*157,822,562*	*77,890,434*	*84,555*	*321,812,914*

Towns. — The total value of products manufactured in the 316 towns in 1932 ($321,812,914) constituted 21.1 per cent of the aggregate value ($1,521,752,939) of all products manufactured in the Commonwealth in that year, and the average number of wage-earners (84,555) employed in the manufacturing industries in

the 316 towns constituted 24.1 per cent of the average number of wage-earners (350,521) employed in all manufacturing establishments in the State. The total population of the 316 towns (as of April 1, 1930) was 1,309,279, and constituted 30.8 per cent of the aggregate population (4,249,614) of the State.

In order of importance, based on the value of products manufactured in 1932, the leading manufacturing towns were: Watertown, Braintree, Walpole, Norwood, Southbridge, Framingham, Easthampton, Andover, West Springfield, and Webster.

Table 20. — Principal Data Relative to Manufactures in 316 Towns in Massachusetts, 1932

Town	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
The State	**8,778**	**$718,347,675**	**$334,358,550**	**350,521**	**$1,521,752,939**
39 Cities	*7,093*	*560,525,113*	*256,468,116*	*265,966*	*1,199,940,025*
316 Towns[1]	*1,685*	*157,822,562*	*77,890,434*	*84,555*	*321,812,914*
Abington	14	1,208,516	589,937	611	2,604,966
Acton	6	438,842	116,221	121	777,072
Adams	21	2,173,063	1,258,787	1,673	4,253,135
Amesbury	28	1,730,700	1,230,801	1,385	4,221,697
Amherst	10	132,663	82,877	77	267,397
Andover	13	3,651,118	1,626,646	1,896	7,427,460
Arlington	25	325,552	149,384	124	662,895
Ashburnham	6	230,223	242,328	259	598,401
Athol	34	2,172,448	1,278,071	1,614	4,818,445
Ayer	9	22,540	36,703	35	93,991
Barnstable	5	30,448	37,040	30	145,525
Belmont	4	10,690	17,140	23	42,558
Billerica	9	2,082,743	1,226,542	1,009	4,002,218
Braintree	22	10,103,417	1,067,080	1,054	11,763,071
Bridgewater	12	2,126,640	830,849	783	3,275,851
Brookline	15	398,721	207,134	246	942,998
Canton	21	2,434,923	951,156	1,053	4,809,740
Chelmsford	8	260,460	449,067	393	1,247,841
Chester	3	65,680	78,587	73	302,442
Clinton	16	1,720,224	1,171,740	1,405	4,258,237
Concord	13	178,062	125,718	134	384,479
Danvers	18	604,698	351,097	419	1,376,604
Dedham	10	102,615	95,218	78	251,326
Deerfield	8	210,024	81,373	57	380,966
Dudley	8	1,782,641	966,335	1,035	3,314,741
East Bridgewater	6	157,540	145,334	126	556,211
Easthampton	16	5,627,054	1,506,777	1,696	8,144,988
Easton	7	704,407	287,408	362	1,497,287
Foxborough	7	331,157	563,914	430	1,670,533
Framingham	37	4,467,735	2,375,212	2,251	8,840,409
Franklin	21	1,405,562	595,497	580	2,772,684
Grafton	7	746,051	552,520	772	1,527,759
Great Barrington	9	525,633	418,386	498	1,345,028
Greenfield	35	1,004,070	875,559	963	3,147,319
Hingham	3	13,456	17,357	15	51,983
Holbrook	5	589,652	225,837	299	1,024,390
Hudson	25	2,041,782	1,605,255	1,909	5,229,250
Kingston	7	464,669	203,433	263	850,647
Lexington	5	102,694	33,412	25	213,082
Manchester	5	25,572	35,404	24	95,945
Mansfield	13	872,156	397,778	430	1,821,289
Marblehead	14	98,482	109,568	136	264,746
Medway	5	267,594	194,154	251	674,272
Merrimac	5	49,496	50,506	58	128,741
Methuen	22	2,227,090	977,787	1,325	3,919,365
Middleborough	19	923,281	367,350	454	1,892,414
Milford	29	1,713,355	770,470	897	3,142,549
Millbury	20	1,723,142	810,699	761	3,149,299
Milton	6	82,678	63,404	43	342,264
Montague	15	1,501,373	1,026,147	1,040	3,352,281
Natick	23	1,166,897	440,286	416	2,120,754
Needham	28	1,114,964	346,352	377	2,159,874
North Andover	7	778,839	696,396	774	1,616,910
North Attleborough	55	1,469,904	1,431,118	1,453	4,153,789
North Brookfield	7	1,565,115	745,569	868	2,973,758
Northbridge	8	2,317,560	1,764,362	2,082	5,119,831
Norton	9	292,939	303,597	330	793,871
Norwood	24	4,640,084	2,521,955	2,033	11,323,670

[1] For 141 towns data cannot be presented without disclosing the operations of individual establishments, and in 85 towns there were no manufacturing establishments coming within the scope of the census canvass; *i.e.*, with product values in excess of $5,000.

Town	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
Orange	20	679,619	433,867	510	1,793,826
Oxford	9	474,466	218,438	305	749,553
Palmer	17	1,293,695	901,482	1,311	3,211,589
Plymouth	15	2,658,805	1,106,558	1,238	5,521,208
Randolph	6	362,466	164,954	177	707,160
Reading	16	1,092,535	347,752	282	1,837,063
Rockland	19	962,678	491,981	534	2,267,498
Saugus	10	130,547	74,464	57	289,268
South Hadley	6	586,831	300,769	318	1,301,432
Southbridge	27	3,871,651	3,029,878	3,080	10,800,819
Spencer	14	2,188,340	994,582	998	3,898,412
Stoneham	18	1,024,012	681,217	845	2,365,350
Stoughton	24	2,752,858	1,062,761	1,175	5,498,475
Swampscott	8	51,772	18,678	20	126,650
Templeton	11	414,742	226,647	249	886,552
Townsend	5	292,543	200,564	207	663,066
Uxbridge	7	4,388,031	1,018,432	1,154	6,523,437
Wakefield	29	757,373	483,146	582	1,758,788
Walpole	12	7,732,085	1,487,087	1,126	11,430,937
Ware	15	1,283,730	690,319	895	2,661,558
Wareham	7	167,608	84,153	74	398,895
Warren	7	607,004	310,333	455	1,082,168
Watertown	46	5,466,978	3,917,230	4,299	16,466,826
Webster	20	4,276,270	1,763,297	2,223	6,777,600
Wellesley	7	177,868	169,833	113	461,068
West Springfield	26	3,444,522	1,707,913	1,529	6,897,497
Westborough	12	525,156	239,894	267	1,010,902
Weymouth	19	1,940,573	815,164	937	4,356,253
Whitman	20	2,597,650	1,452,370	1,400	6,733,872
Winchendon	16	1,151,389	726,293	917	2,318,069
Winchester	16	907,320	563,469	482	1,959,027
Winthrop	8	62,713	55,781	42	175,616
All other towns	351	28,289,098	15,424,494	17,226	60,741,232

Metropolitan Boston. —As defined for purposes of the annual census of manufactures in Massachusetts, "Metropolitan Boston" comprises 14 cities and 29 towns included within a radius of about 15 miles from the State House in Boston. Within this area in 1932 were located 4,225 manufacturing establishments, in which products valued at $704,875,376 were manufactured. The average number of wage-earners employed in these establishments during the year was 114,986, and the total amount paid in wages was $125,855,342. The number of manufacturing establishments in Metropolitan Boston in 1932 constituted 48.1 per cent of the total number (8,778) in the entire State: the value of all products manufactured constituted 46.3 per cent of the total value of all products manufactured in the State; and the number of wage-earners was 32.8 per cent of the total number employed in all manufacturing establishments in that year.

Principal data relative to manufactures in Metropolitan Boston for the years 1922 to 1932, inclusive, are presented in Table 21; for each of the 14 cities and 29 towns, in Table 22; and for the leading industries in Table 23.

Table 21. — Principal Data Relative to Manufactures in Metropolitan Boston,[1] 1922–1932

Years	All Industries				
	Number of Establishments	Capital Invested	Value of Stock and Materials Used	Amount of Wages paid during the Year	Average Number of Wage-earners Employed	Value of Products
1922	4,482	$804,668,324	$537,911,241	$210,657,440	178,343	$1,070,493,317
1923	4,740	[2]	620,031,648	245,640,825	193,000	1,232,206,787
1924	4,561	849,235,200	584,512,038	230,727,844	178,487	1,148,260,013
1925	4,511	[2]	606,378,433	231,857,192	175,801	1,235,875,285
1926	4,577	851,797,589	639,566,767	245,916,443	184,814	1,272,959,199
1927	4,755	[2]	633,003,950	237,708,229	178,316	1,289,801,723
1928	4,713	897,124,478	648,665,366	235,017,427	174,522	1,278,895,983
1929[1]	4,831	[2]	688,277,589	248,419,990	182,780	1,409,136,706
1930	4,652	866,181,625	590,738,808	215,334,364	162,699	1,181,391,542
1931	4,536	[2]	452,641,062	171,567,144	140,074	955,211,023
1932	4,225	674,095,448	337,019,811	125,855,342	114,986	704,875,376

[1] For a list of cities and towns in Metropolitan Boston, see Table 22 on page 73. In 1929 and thereafter, the towns of Norwood, Stoughton, and Walpole were included in this District.
[2] Not called for on the questionnaire.

Table 22. — Principal Data Relative to Manufactures in Metropolitan Boston, 1932: By Cities and Towns

Municipalities	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
Metropolitan Boston	**4,225**	**$337,019,811**	**$125,855,342**	**114,986**	**$704,875,376**
The 14 Cities	*3,843*	*295,494,027*	*110,618,899*	*99,888*	*625,232,871*
Boston	2,284	144,649,486	52,972,079	46,037	298,032,533
Cambridge	359	33,909,977	13,662,429	13,875	98,485,092
Chelsea	110	5,996,498	3,810,668	3,803	13,599,045
Everett	109	28,574,384	5,969,823	4,510	50,598,449
Lynn	333	19,738,591	11,709,525	12,630	50,081,533
Malden	102	6,605,556	2,387,905	2,463	15,775,018
Medford	56	2,529,891	956,337	875	4,816,361
Melrose	20	375,308	246,499	212	886,700
Newton	55	3,914,278	1,584,278	1,661	8,736,303
Quincy	139	7,555,128	7,350,610	4,897	19,192,057
Revere	20	249,589	161,889	151	598,783
Somerville	140	35,964,326	6,213,558	5,317	50,212,222
Waltham	68	2,393,868	2,131,649	2,130	7,652,732
Woburn	48	3,037,147	1,461,650	1,327	6,566,043
The 29 Towns	*382*	*41,525,784*	*15,236,443*	*15,098*	*79,642,505*
Arlington	25	325,552	149,384	124	662,895
Belmont	4	10,690	17,140	23	42,558
Braintree	22	10,103,417	1,067,080	1,054	11,763,071
Brookline	15	398,721	207,134	246	942,998
Canton	21	2,434,923	951,156	1,053	4,809,740
Dedham	10	102,615	95,218	78	251,326
Hingham	3	13,456	17,357	15	51,983
Lexington	5	102,694	33,412	25	213,082
Milton	6	82,678	63,404	43	342,264
Needham	28	1,114,964	346,352	377	2,159,874
Norwood	24	4,640,084	2,521,955	2,033	11,323,670
Reading	16	1,092,535	347,752	282	1,837,063
Saugus	10	130,547	74,464	57	289,268
Stoneham	18	1,024,012	681,217	845	2,365,350
Stoughton	24	2,752,858	1,062,761	1,175	5,498,475
Swampscott	8	51,772	18,678	20	126,650
Wakefield	29	757,373	483,146	582	1,758,788
Walpole	12	7,732,085	1,487,087	1,126	11,430,937
Watertown	46	5,466,978	3,917,230	4,299	16,466,826
Wellesley	7	177,868	169,833	113	461,068
Weymouth	19	1,940,573	815,164	937	4,356,253
Winchester	16	907,320	563,469	482	1,959,027
Winthrop	8	62,713	55,781	42	175,616
6 other towns[1]	6	99,356	90,269	67	353,723

[1] Includes three towns (Cohasset, Hull, and Nahant) in which there were no manufacturing establishments, and three towns (Dover, Weston, and Westwood) for which data cannot be shown separately without disclosing the operations of individual establishments.

Table 23. — Principal Data Relative to the Leading Manufacturing Industries in Metropolitan Boston, 1932

Principal Industries (Arranged in the order of value of products)	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
Metropolitan Boston	**4,225**	**$337,019,811**	**$125,855,342**	**114,986**	**$704,875,376**
Printing and publishing	432	15,304,122	13,899,616	8,163	56,037,967
Boots and shoes, other than rubber	128	18,032,581	12,040,111	13,934	38,907,542
Bread and other bakery products	481	15,839,590	6,488,760	5,676	38,497,285
Clothing, men's and women's	376	17,693,350	6,908,107	7,583	33,309,552
Electrical machinery, apparatus, and supplies [1]	56	7,689,776	5,517,609	5,655	25,594,777
Meat packing, wholesale	19	19,354,890	1,963,979	1,690	24,660,734
Confectionery	93	10,888,842	3,440,029	4,785	20,924,878
Boot and shoe cut stock and findings, not made in boot and shoe factories	118	12,646,509	2,062,985	2,161	18,074,588
Rubber goods, other than tires, inner tubes, and boots and shoes	38	7,015,967	2,781,611	3,195	15,710,537
Foundry and machine-shop products, not elsewhere classified	161	5,698,605	4,126,658	3,447	15,485,087
Coffee and spice, roasting and grinding	22	9,110,769	594,060	515	11,609,788
Knit goods	42	6,366,396	1,957,079	2,472	10,926,903
Boxes, paper	48	5,720,370	2,199,034	2,441	10,257,107
Leather: Tanned, curried, and finished	31	5,091,738	2,583,119	2,372	10,136,326
Other industries [2]	2,180	180,566,306	59,292,585	50,897	374,742,305

[1] Includes Radio apparatus, which, separately tabulated, registered 9 establishments with product value of $2,112,593.

[2] Includes data for all industries for which the value of products in 1932 was less than $10,000,000 as well as the industries, Soap; sugar refining; petroleum refining; shipbuilding; cutlery and edge tools; and motor vehicles, the data for which cannot be given separately without disclosing the operations of individual establishments.

Counties. — Principal data having reference to manufactures in each of the 14 counties of the State in 1932 are presented in Table 24. Based on the value of products, Middlesex County ranked first among the counties with value of products amounting to $346,764,106, or 22.8 per cent of the total for the State. Suffolk County was a close second, with a value of products amounting to $312,405,977, or 20.5 per cent. The other counties in order of rank were: Essex, Worcester, Hampden, Bristol, Norfolk, Plymouth, Berkshire, Hampshire, Franklin, Barnstable, Nantucket, and Dukes.

Table 24. — Principal Data Relative to the Manufacturing Industries in Massachusetts — By Counties, 1932

Counties	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
The State	**8,778**	**$718,347,675**	**$334,358,550**	**350,521**	**$1,521,752,939**
Barnstable	19	138,122	81,516	75	338,471
Berkshire	165	19,115,969	10,113,936	11,697	42,342,059
Bristol	750	58,641,970	34,700,895	44,903	123,113,517
Dukes	3	5,563	9,435	6	30,641
Essex	1,257	93,495,261	52,660,948	59,495	206,804,864
Franklin	101	5,605,249	3,132,974	3,315	12,734,966
Hampden	592	53,711,358	30,398,774	30,953	126,750,820
Hampshire	108	9,397,631	4,298,185	4,814	18,137,780
Middlesex	1,543	165,719,067	62,116,448	63,623	346,764,106
Nantucket	4	24,953	31,068	18	103,163
Norfolk	398	44,867,186	18,889,931	15,899	85,249,955
Plymouth	377	27,094,048	13,526,845	14,179	58,491,869
Suffolk	2,422	150,958,286	57,000,417	50,033	312,405,977
Worcester	1,039	89,573,012	47,397,178	51,511	188,484,751

Principal Industries. — A summary of the data relative to the principal manufacturing industries in Massachusetts in 1932, arranged in the order of value of products in 1932, is presented in Table 25. The total value of products of the 17 principal industries specified was $861,850,723, and constituted 56.6 per cent of the aggregate value of all products ($1,521,752,939) manufactured in Massachusetts during the year. Comparable data for each of these principal industries for a series of years, 1920 to 1932, inclusive, are presented in Table 26.

Table 25. — Summary of Data Relative to the Principal Manufacturing Industries in Massachusetts, 1932

Principal Industries (Arranged in the order of value of products)	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
All Industries	**8,778**	**$718,347,675**	**$334,358,550**	**350,521**	**$1,521,752,939**
Boots and shoes, other than rubber [1]	392	60,709,609	36,843,238	43,265	126,222,124
Woolen and worsted goods	116	49,305,061	22,708,245	28,593	87,814,050
Printing and publishing	767	20,617,212	19,667,336	12,022	77,732,521
Cotton goods, excluding cotton small wares	105	30,030,280	22,698,692	32,464	68,040,258
Bread and other bakery products	1,111	25,236,168	10,643,686	9,315	59,488,548
Dyeing and finishing textiles	71	34,010,823	10,377,674	11,118	54,353,966
Electrical machinery, apparatus, and supplies [2]	103	18,228,170	12,254,949	13,571	53,643,578
Clothing, men's and women's, including work clothing	474	23,706,198	9,564,654	11,874	44,324,186
Paper and wood pulp	75	19,304,723	8,901,610	9,382	39,335,415
Sundry and machine-shop products	388	11,685,917	12,556,361	10,179	36,472,363
Gas, manufactured, illuminating and heating	34	10,491,835	4,405,548	2,670	36,386,578
Leather: Tanned, curried, and finished	101	19,253,879	8,651,070	7,932	35,608,824
Boot and shoe cut stock and findings, not made in boot and shoe factories	334	22,829,247	5,161,390	5,817	35,280,809
Rubber goods, including rubber tires and inner tubes [3]	58	14,840,426	5,778,272	6,347	33,351,480
Meat packing, wholesale	29	22,994,226	2,547,086	2,165	29,408,410
Confectionery	124	11,628,850	3,769,139	5,183	22,227,447
Knit goods	66	11,560,929	5,306,107	6,772	22,160,166
All other industries [4]	4,430	311,914,122	132,523,493	131,852	659,902,216

[1] For Boot and shoe cut stock and findings, not made in boot and shoe factories, see page 76.

[2] Includes Radio apparatus. This industry, separately tabulated in 1932, would register a product value of $6,812,893.

[3] Exclusive of rubber boots and shoes.

[4] Includes data for all industries for which the value of products in 1932 was less than $20,000,000 as well as the industries, Soap; sugar refining; and petroleum refining, the data for which cannot be given separately without disclosing the operations of individual establishments.

The total value of products of the 17 principal industries specified was $861,850,723, and constituted 56.6 per cent of the aggregate value of products ($1,521,752,939) manufactured in Massachusetts during the year. Data for each of these principal industries for the series of years 1920 to 1932, inclusive, are presented in table 26.

Table 26. — Summary of Data Relative to Manufactures in Massachusetts: By Principal Industries, 1920–1932 [1]

Years	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
		All Industries			
1920	10,262	$2,489,237,446	$891,176,822	695,832	$4,370,276,822
1921	9,994	1,441,035,230	641,360,936	579,071	2,849,413,516
1922	10,056	1,512,510,105	678,073,968	612,682	3,002,625,958
1923	10,519	1,835,218,349	799,363,111	667,443	3,570,543,265
1924	10,174	1,629,342,134	711,812,104	589,364	3,126,137,145
1925	10,027	1,794,643,051	716,155,593	591,438	3,426,617,326
1926	9,903	1,790,611,294	738,208,510	602,343	3,419,814,877
1927	10,037	1,678,812,411	705,929,549	578,068	3,317,851,888
1928	9,971	1,663,155,564	670,063,291	540,927	3,224,227,651
1929	9,872	1,681,432,788	694,805,312	557,494	3,392,162,237
1930	9,586	1,333,317,227	573,838,044	481,449	2,676,387,256
1931	9,305	1,015,093,739	474,189,202	434,441	2,157,450,449
1932	8,778	718,347,675	334,358,550	350,521	1,521,752,939
		Boots and Shoes, Other than Rubber			
1920	518	266,378,621	85,820,835	69,273	443,322,965
1921	543	147,350,442	76,395,714	64,494	285,102,006
1922	580	139,281,827	80,334,802	70,294	276,232,880
1923	595	146,720,772	82,916,416	69,397	290,674,403
1924	567	120,976,254	72,462,742	62,969	246,897,275
1925	537	119,764,801	65,496,971	57,405	240,943,504
1926	508	121,665,003	70,444,841	59,738	244,177,601
1927	469	120,353,570	65,282,193	55,986	237,516,655
1928	453	126,778,246	63,871,277	55,478	238,884,158
1929	436	124,024,880	64,205,152	55,093	241,587,864
1930	420	95,336,095	50,896,764	49,105	185,072,323
1931	397	79,519,951	45,679,225	47,664	160,666,398
1932	392	60,709,609	36,843,238	43,265	126,222,124

[1] In making comparisons for the several years of the money values presented in this summary, due allowance should be made for price fluctuations from year to year. The *values* of products manufactured do not necessarily represent the relative *volume* of goods produced in the several years.

Table 26. — Continued

Years	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
Boot and Shoe Cut Stock and Findings (Not made in boot and shoe factories)					
1920	393	$66,974,420	$9,186,674	8,128	$90,362,987
1921	381	45,477,555	7,133,009	6,403	63,837,523
1922	420	49,638,963	7,817,846	7,406	70,352,803
1923	417	47,772,107	7,921,949	7,349	68,839,110
1924	381	42,123,956	7,269,733	6,536	60,337,334
1925	407	45,012,775	7,995,409	6,991	66,077,971
1926	361	52,775,368	8,973,167	7,806	73,795,554
1927	393	60,126,412	8,830,087	7,763	84,124,051
1928	364	63,242,637	8,286,694	7,615	83,979,422
1929	361	56,167,055	8,391,863	7,658	78,200,992
1930	349	42,855,725	7,259,574	6,917	59,345,418
1931	351	31,775,145	6,363,401	6,463	46,348,503
1932	334	22,829,247	5,161,390	5,817	35,280,809
Woolen and Worsted Goods					
1920	186	218,013,382	66,844,648	51,689	344,532,434
1921	180	142,163,532	63,230,393	56,644	262,633,663
1922	189	137,145,274	61,391,289	55,886	266,054,554
1923	186	202,207,973	76,189,812	64,842	352,136,045
1924	190	171,426,748	65,563,390	54,277	280,002,109
1925	187	200,289,254	64,931,507	54,876	309,528,290
1926	180	187,787,996	61,952,399	54,638	295,175,084
1927	174	163,149,995	58,035,387	51,064	268,835,806
1928	171	145,440,485	51,882,279	45,248	234,206,586
1929	156	146,020,898	52,304,583	45,673	242,898,460
1930	145	92,027,443	39,245,500	35,104	156,943,782
1931	128	86,659,519	37,436,905	37,221	147,701,378
1932	116	49,305,061	22,708,245	28,593	87,814,050
Printing and Publishing					
1920	775	32,873,508	19,245,705	12,969	83,897,559
1921	890[1]	35,301,875	19,841,638	12,764	106,850,504
1922	685	30,445,672	21,052,626	13,466	85,697,580
1923	917[1]	33,835,083	23,289,201	14,238	117,436,792
1924	756	30,323,839	23,701,120	13,908	93,698,513
1925	951[1]	34,561,352	24,609,306	14,231	125,176,183
1926	748	34,035,042	25,436,679	14,713	107,283,046
1927	1,022[1]	35,368,221	25,482,123	14,382	131,975,238
1928	821	34,795,664	26,594,305	14,634	112,243,252
1929	1,000[1]	35,245,669	28,115,167	15,198	140,481,332
1930	799	32,050,850	27,077,682	15,051	111,526,855
1931	963[1]	26,416,073	23,456,179	13,224	111,395,181
1932	767	20,617,212	19,667,336	12,022	77,732,521
Cotton Goods, excluding Cotton Small Wares					
1920	191	415,501,520	130,905,309	113,145	686,571,606
1921	182	153,725,300	96,547,054	106,337	313,829,605
1922	187	185,934,180	103,016,087	111,165	366,030,361
1923	191	223,569,567	115,080,841	113,707	415,922,838
1924	178	175,089,768	86,795,081	89,095	296,831,284
1925	178	200,972,528	91,812,779	96,182	345,864,097
1926	173	166,821,709	88,865,550	91,466	292,063,441
1927	163	145,630,938	88,089,667	90,875	284,706,007
1928	153	120,815,771	61,215,058	65,192	216,997,848
1929	135	125,441,636	65,556,859	70,788	233,618,009
1930	134	79,531,622	47,363,957	53,745	151,834,379
1931	120	53,329,684	38,868,889	46,990	114,707,445
1932	105	30,030,280	22,698,692	32,464	68,040,258
Bread and Other Bakery Products					
1920	1,083	47,216,099	11,132,441	8,698	76,825,786
1921	1,125	33,596,767	11,328,144	8,852	63,972,784
1922	1,026	30,666,836	10,557,076	9,185	60,836,491
1923	1,099	32,379,305	11,974,120	9,288	64,733,168
1924	1,072	32,793,242	12,022,863	9,200	65,723,363
1925	1,031	36,517,214	11,390,333	8,429	68,845,944
1926	1,090	38,573,698	11,558,473	8,697	74,014,253
1927	1,044	37,101,802	11,028,342	8,473	73,706,221
1928	1,108	38,297,898	11,351,600	8,770	76,006,262
1929	1,077	39,664,130	13,700,195	10,413	80,270,302
1930	1,132	36,656,100	13,036,847	10,041	78,462,469
1931	1,119	29,587,755	12,753,731	10,079	67,805,420
1932	1,111	25,236,168	10,643,686	9,315	59,488,548

[1] The census for the years 1921, 1923, 1925, 1927, 1929, and 1931 included certain publishing establishments not canvassed in the other years specified, and data for these years, therefore, are not strictly comparable with corresponding data for the other years specified.

Table 26. -- Continued

Years	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
Dying and Finishing Textiles					
1920	66	$63,246,501	$18,872,562	16,292	$106,264,963
1921	63	52,664,331	14,142,174	13,318	92,953,438
1922	65	51,913,956	14,067,567	13,332	84,826,219
1923	75	59,282,801	16,099,333	14,074	101,824,142
1924	66	47,812,253	14,145,036	12,764	76,968,958
1925	65	87,585,678	16,098,858	13,872	119,109,701
1926	65	69,357,890	15,974,822	13,772	102,814,471
1927	68	51,434,428	16,229,352	13,826	84,459,666
1928	66	52,048,921	15,738,360	13,629	83,707,199
1929	67	53,034,427	16,853,664	14,450	93,148,770
1930	65	50,849,268	14,838,020	13,081	75,853,910
1931	70	47,794,925	14,926,387	13,060	76,819,045
1932	71	34,010,823	10,377,674	11,118	54,353,966
Electrical Machinery, Apparatus, and Supplies					
1920	105	48,894,162	38,289,830	28,561	126,861,130
1921	105	27,951,204	20,348,264	17,635	72,047,824
1922	116	33,043,527	24,930,824	19,064	93,083,923
1923	130	43,889,975	34,482,705	26,350	117,575,926
1924	130	48,721,722	33,227,577	24,523	129,905,665
1925	116	43,794,331	35,109,393	25,065	147,056,901
1926	128	64,534,132	39,142,134	27,899	177,148,280
1927	122	42,197,890	33,903,793	24,759	139,348,725
1928	120	56,874,825	33,972,583	24,788	156,081,762
1929	106	64,323,352	41,011,734	28,844	184,786,944
1930	111	45,095,735	31,948,815	24,217	120,334,662
1931 [1]	102	31,777,549	22,751,703	20,055	104,325,847
1932 [1]	103	18,228,170	12,254,949	13,571	53,643,578
Clothing, Men's and Women's, Including Work Clothing					
1920	460	41,457,483	14,343,454	12,129	73,533,991
1921	443	26,471,823	11,219,297	10,444	50,262,173
1922	442	28,925,106	12,763,975	11,519	53,946,067
1923	511	38,703,840	14,981,950	12,727	70,819,700
1924	486	34,899,421	13,405,639	11,549	63,904,828
1925	439	33,158,905	12,023,478	10,665	61,187,773
1926	483	36,284,848	14,263,815	12,115	68,554,055
1927	472	37,713,123	15,131,382	13,163	72,296,725
1928	500	37,087,769	14,354,468	13,310	69,021,128
1929	500	41,841,471	15,087,955	13,174	78,174,045
1930	489	35,613,636	14,398,266	13,540	65,951,764
1931	487	31,017,083	13,216,215	14,052	59,920,324
1932	474	23,706,198	9,564,654	11,874	44,324,186
Paper and Wood Pulp					
1920	82	89,158,276	21,633,105	15,215	145,017,866
1921	81	40,614,356	12,592,648	12,427	62,865,216
1922	79	49,356,524	15,004,725	13,490	84,440,050
1923	82	57,601,310	17,085,424	13,324	93,641,621
1924	81	53,194,877	17,047,879	13,423	90,146,594
1925	84	54,854,405	16,424,005	12,915	90,126,831
1926	83	56,818,516	17,467,461	13,205	98,598,943
1927	83	51,815,477	15,904,292	12,368	93,177,974
1928	84	53,105,186	16,420,703	12,602	93,939,888
1929	76	50,091,469	16,648,893	12,361	95,084,573
1930	76	41,204,938	14,881,473	11,603	78,339,273
1931	77	27,898,672	11,960,645	10,652	58,148,375
1932	75	19,304,723	8,901,610	9,382	39,335,415
Foundry and Machine-Shop Products					
1920	569	68,534,988	52,459,471	34,473	166,340,007
1921	515	35,452,972	26,755,815	20,021	112,172,802
1922	541	29,172,980	27,306,697	20,837	86,448,581
1923	553	38,728,025	36,267,289	24,660	114,929,133
1924	539	37,993,215	32,473,734	22,414	106,461,283
1925	500	31,046,164	28,919,791	19,541	90,638,434
1926	502	34,479,344	30,851,687	20,419	99,321,009
1927	496	30,759,703	30,059,274	19,898	94,149,409
1928	475	32,606,432	30,447,463	19,803	99,613,068
1929	465	36,893,962	32,969,609	21,243	114,965,036
1930	442	28,219,034	27,582,822	18,492	88,162,402
1931	414	17,806,400	18,841,627	14,748	60,143,267
1932	388	11,685,917	12,556,361	10,179	36,472,363

[1] Includes Radio apparatus, heretofore tabulated with this industry and retained here for purposes of comparison. Presented separately, in 1932, Radio apparatus would register 21 establishments with product value of $6,812,893.

Table 26. — Continued

Years	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
Gas, Manufactured, Illuminating and Heating					
1920	51	$12,169,919	$3,718,543	2,427	$31,356,276
1921	47	13,679,896	4,324,527	2,524	33,808,668
1922	47	13,116,729	4,436,757	2,825	34,034,561
1923	49	15,150,715	6,342,914	4,146	37,188,227
1924	48	11,781,221	5,325,159	3,405	34,245,470
1925	46	13,888,004	6,205,743	4,229	36,659,265
1926	45	10,086,179	4,489,990	2,789[1]	31,806,393
1927	41	16,201,703	6,046,546	4,079	38,657,688
1928	40	13,729,991	5,609,403	3,437[1]	37,469,887
1929	39	15,835,388	6,516,333	4,096	41,264,782
1930	37	11,849,481	5,800,474	3,371[1]	40,193,954
1931	32	13,104,100	5,170,219	3,304	38,598,658
1932	34	10,491,835	4,405,548	2,670[1]	36,386,578
Leather, Tanned, Curried, and Finished					
1920	132	57,410,060	17,913,018	12,447	88,344,819
1921	119	35,801,421	11,389,125	9,038	61,106,452
1922	122	31,383,055	13,298,797	10,813	57,669,973
1923	122	40,439,335	15,340,403	11,437	71,098,478
1924	123	42,867,178	15,023,961	11,010	70,603,298
1925	118	42,430,939	14,178,183	10,438	70,708,050
1926	123	40,698,690	14,016,402	10,241	66,600,352
1927	115	47,860,959	14,587,638	10,768	77,649,457
1928	124	53,764,692	14,531,789	10,975	82,268,326
1929	113	60,240,934	14,206,501	10,707	88,348,403
1930	107	41,890,582	11,645,166	8,953	63,591,977
1931	98	29,966,431	10,697,504	8,657	50,051,338
1932	101	19,253,879	8,651,070	7,932	35,608,824
Rubber Goods, including Rubber Tires and Inner Tubes[2]					
1920	49	42,001,564	11,779,505	8,130	85,778,471
1921	52	30,349,377	9,005,575	7,847	62,714,484
1922	61	37,096,491	11,924,464	10,197	75,829,765
1923	59	48,409,783	14,698,488	11,388	84,098,920
1924	58	47,010,344	13,393,684	10,406	84,681,207
1925	52	61,611,753	13,904,175	10,740	108,594,705
1926	56	71,670,965	13,648,767	10,444	110,305,176
1927	64	56,715,715	13,298,241	10,364	97,717,724
1928	68	53,136,600	13,714,866	10,552	89,672,751
1929	62	44,604,202	12,400,228	9,764	76,439,857
1930	65	33,032,734	10,459,597	8,658	62,870,682
1931	60	19,928,837	7,758,324	6,728	46,371,115
1932	58	14,840,426	5,778,272	6,347	33,351,480
Meat Packing, Wholesale					
1920	32	73,125,278	4,868,116	3,436	89,234,029
1921	33	41,052,369	3,798,379	2,986	48,810,846
1922	27	46,193,957	3,490,994	3,153	55,093,617
1923	33	47,128,857	4,604,972	3,651	56,765,176
1924	32	46,832,366	4,679,275	3,506	56,799,375
1925	33	52,620,735	4,121,768	3,292	60,710,531
1926	28	54,604,670	3,759,969	3,000	63,220,783
1927	40	51,139,522	4,127,491	3,191	58,796,506
1928	37	54,604,066	3,855,033	2,988	63,509,485
1929	33	56,599,409	3,572,432	2,594	64,354,688
1930	31	51,030,796	3,435,693	2,530	59,425,738
1931	31	32,764,048	2,871,319	2,123	39,704,308
1932	29	22,994,226	2,547,086	2,165	29,408,410
Confectionery					
1920	152	39,295,866	8,617,406	9,836	61,280,594
1921	146	24,643,965	6,545,314	8,202	42,975,013
1922	144	23,628,231	6,670,030	8,006	41,599,379
1923	149	26,504,012	7,475,548	8,805	48,618,574
1924	141	24,968,335	7,456,716	7,899	45,875,376
1925	134	25,842,869	6,755,486	7,625	49,333,972
1926	147	26,910,860	7,472,929	8,372	50,669,112
1927	148	28,308,227	7,243,925	8,373	49,673,740
1928	153	25,547,674	6,916,799	7,489	46,124,991
1929	144	22,821,300	6,744,576	7,471	43,932,366
1930	144	19,994,216	6,291,556	6,541	37,815,816
1931	127	14,646,330	4,983,946	5,943	30,176,229
1932	124	11,628,850	3,769,139	5,183	22,227,447

[1] Does not include street men.
[2] Exclusive of rubber boots and shoes.

Table 26. — Continued

Years	Number of Establishments	Value of Stock and Materials Used	Amount of Wages Paid during the Year	Average Number of Wage-earners Employed	Value of Products
		Knit Goods			
1920	71	$31,871,942	$10,728,570	10,625	$54,059,574
1921	81	20,251,896	8,969,044	10,497	34,924,807
1922	88	23,801,579	10,467,806	11,663	44,219,560
1923	87	25,923,485	10,605,684	11,652	46,834,545
1924	88	20,450,911	9,443,959	9,863	38,487,391
1925	88	25,902,556	9,715,424	10,551	46,386,519
1926	92	22,362,814	9,512,858	10,088	44,060,059
1927	93	22,315,903	9,339,035	9,660	43,936,724
1928	90	21,070,158	9,162,848	9,092	40,165,755
1929	86	20,401,873	8,945,286	8,817	41,050,135
1930	80	16,981,448	7,878,614	8,133	34,479,056
1931	70	14,997,853	6,765,890	7,637	29,460,966
1932	66	11,560,929	5,306,107	6,772	22,160,166
		Ship and Boat Building, Steel and Wooden, and Repair Work			
1920	43	13,812,531	12,400,243	5,816	31,757,906
1921	39	9,707,538	7,495,008	6,015	22,312,448
1922	39	3,849,721	4,732,473	3,703	10,167,786
1923	39	5,021,050	5,957,599	3,977	14,078,845
1924	39	3,885,897	5,421,364	3,268	12,643,165
1925	41	5,558,093	6,954,277	4,167	14,187,348
1926	37	4,878,883	8,209,632	5,079	14,803,765
1927	38	4,402,476	6,478,876	4,185	14,151,632
1928	35	4,775,415	5,954,352	3,413	13,439,146
1929	40	5,583,995	6,499,543	3,635	16,449,438
1930	40	9,663,618	7,558,162	4,598	19,871,065
1931	35	12,970,551	7,669,775	4,846	27,711,085
1932	32	5,685,947	6,232,299	3,779	14,302,756
		Furniture, including Store and Office Fixtures			
1920	144	12,882,852	9,747,660	7,520	32,094,031
1921	160	10,941,342	6,922,987	6,251	24,039,399
1922	177	11,536,245	8,412,753	7,306	26,994,042
1923	189	14,616,185	9,965,802	8,097	34,691,239
1924	187	15,021,243	10,160,663	7,863	34,609,438
1925	191	16,050,928	10,172,074	7,834	33,638,635
1926	208	16,040,692	11,504,758	8,440	37,530,228
1927	194	16,682,116	11,027,153	8,077	36,796,137
1928	220	16,675,734	11,110,481	8,224	37,464,410
1929	217	19,029,630	11,926,867	8,598	41,921,577
1930	222	13,256,836	9,585,968	7,357	32,057,862
1931	204	10,541,937	7,051,101	6,153	24,143,874
1932	193	6,902,035	4,826,916	4,866	15,923,502
		Textile Machinery and Parts			
1920	107	32,288,692	28,412,882	19,686	81,595,711
1921	127	23,199,148	20,836,446	16,479	67,204,551
1922	124	16,955,862	17,279,848	14,846	52,888,931
1923	137	24,518,360	24,318,310	18,668	69,343,009
1924	129	14,986,290	18,352,490	14,666	50,253,757
1925	123	16,584,208	17,769,454	13,687	51,411,150
1926	130	15,333,814	16,786,043	12,623	47,739,905
1927	119	15,008,418	16,242,087	12,009	46,865,937
1928	119	12,350,981	13,651,765	10,399	39,082,682
1929	111	12,467,673	14,233,661	10,597	41,202,970
1930	109	8,423,447	10,512,566	8,602	27,033,415
1931	102	6,791,520	8,865,356	7,527	24,090,354
1932	101	4,197,545	5,153,252	5,197	13,635,758
		Silk Goods			
1920	22	23,302,010	6,067,423	5,626	33,636,882
1921	23	13,162,836	4,467,028	5,864	23,604,010
1922	25	15,427,762	5,988,741	6,197	28,097,042
1923	24	18,820,913	6,782,643	6,448	33,646,974
1924	25	15,033,466	6,176,952	5,682	29,076,154
1925	27	21,512,814	6,840,098	6,497	36,608,014
1926	28	18,984,539	7,425,459	6,559	33,100,630
1927	33	23,218,826	7,615,872	7,357	38,220,144
1928	30	16,401,463	7,137,603	6,782	32,022,695
1929[1]	42	20,959,668	7,105,466	7,390	37,412,704
1930[1]	41	12,223,525	5,893,804	5,684	24,631,823
1931[1]	38	10,468,547	5,809,739	6,939	22,920,329
1932[1]	36	7,665,658	4,169,366	5,647	13,642,378

[1] Includes rayon goods.

CHARTS

Plate 1

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933

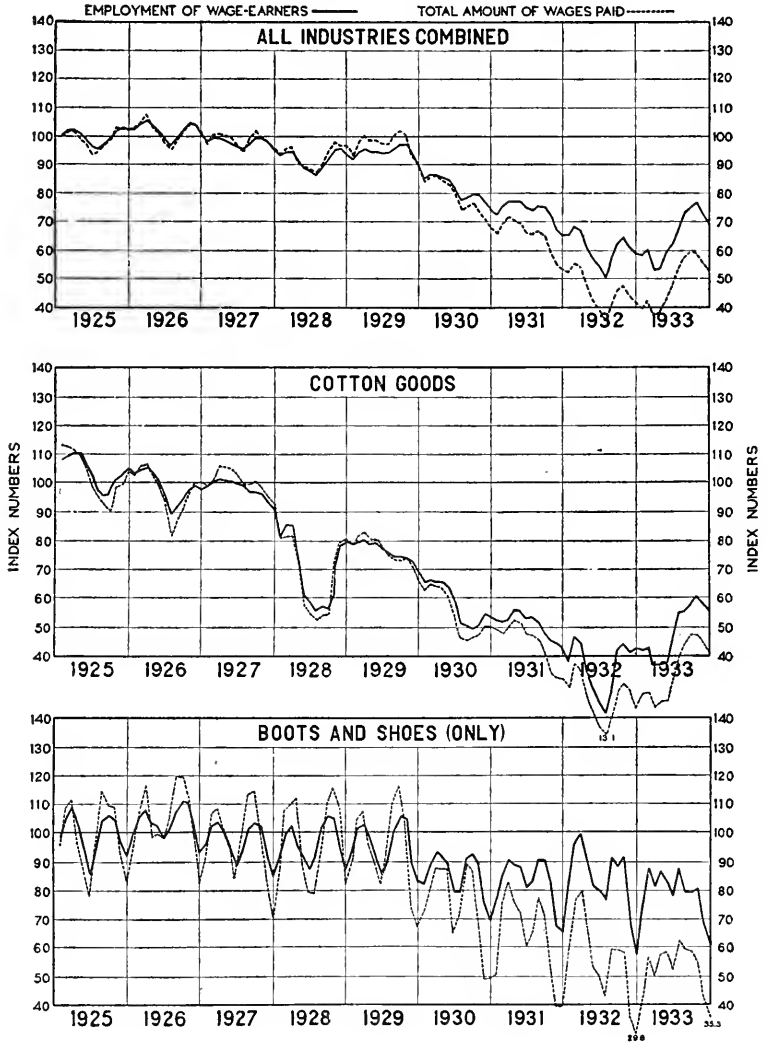


Plate 2

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933 (Continued)

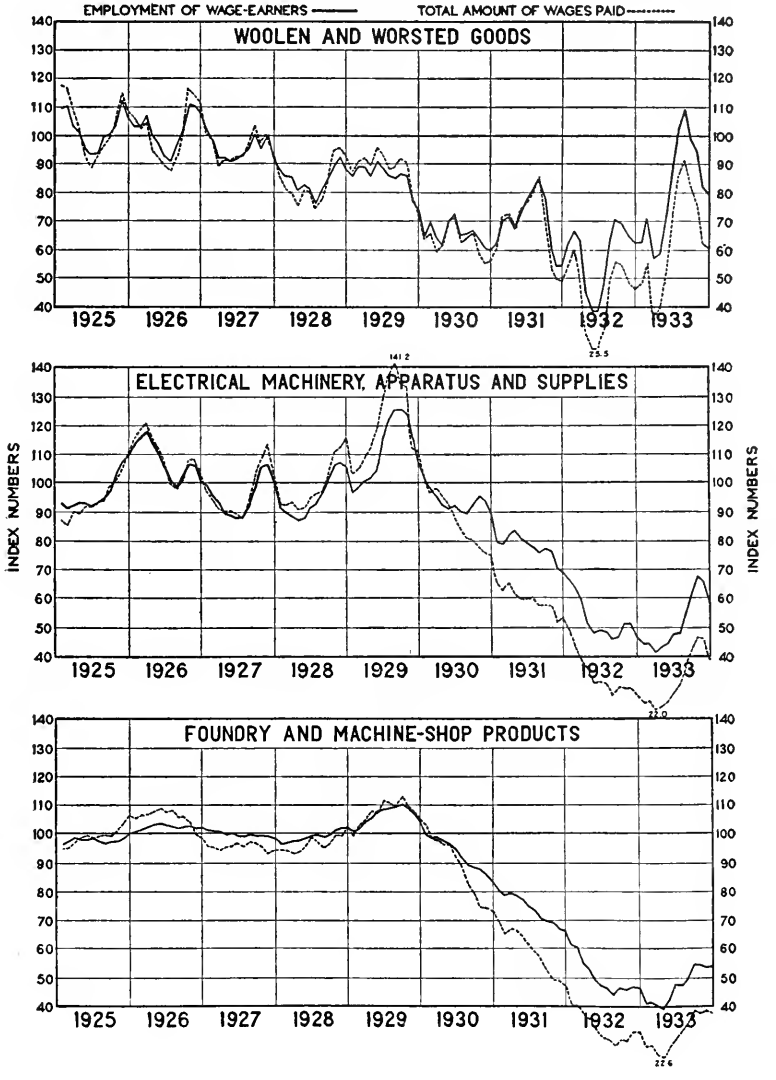


Plate 3

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933 (Continued)

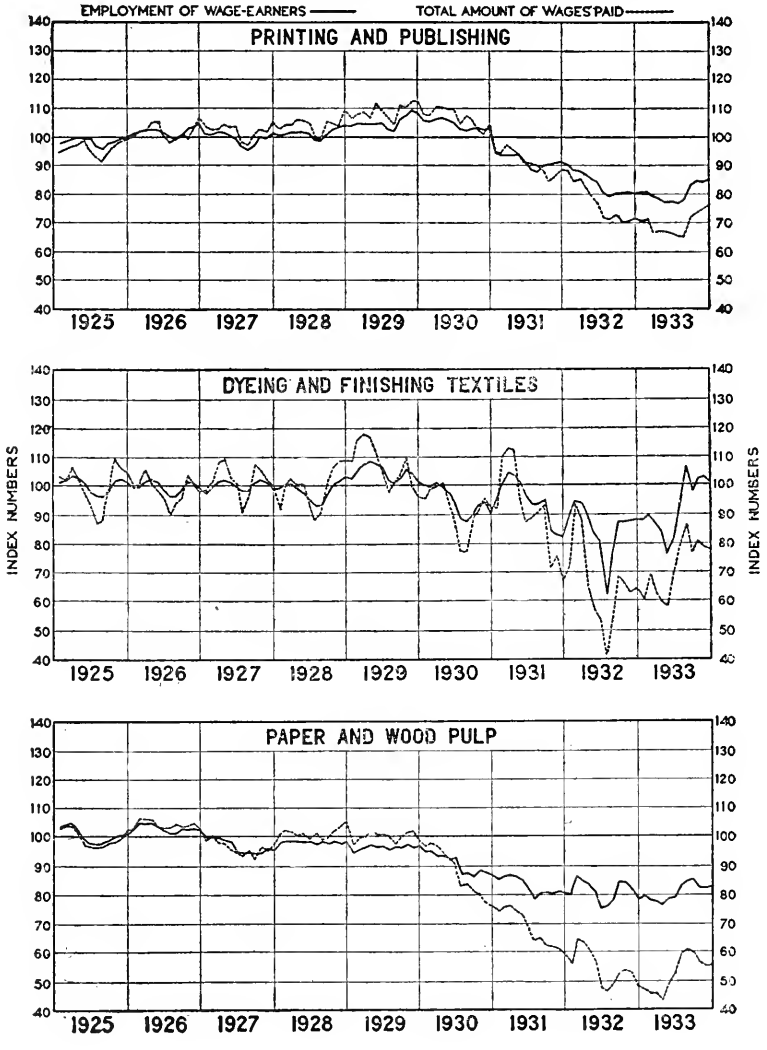


Plate 4

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933 (Continued)

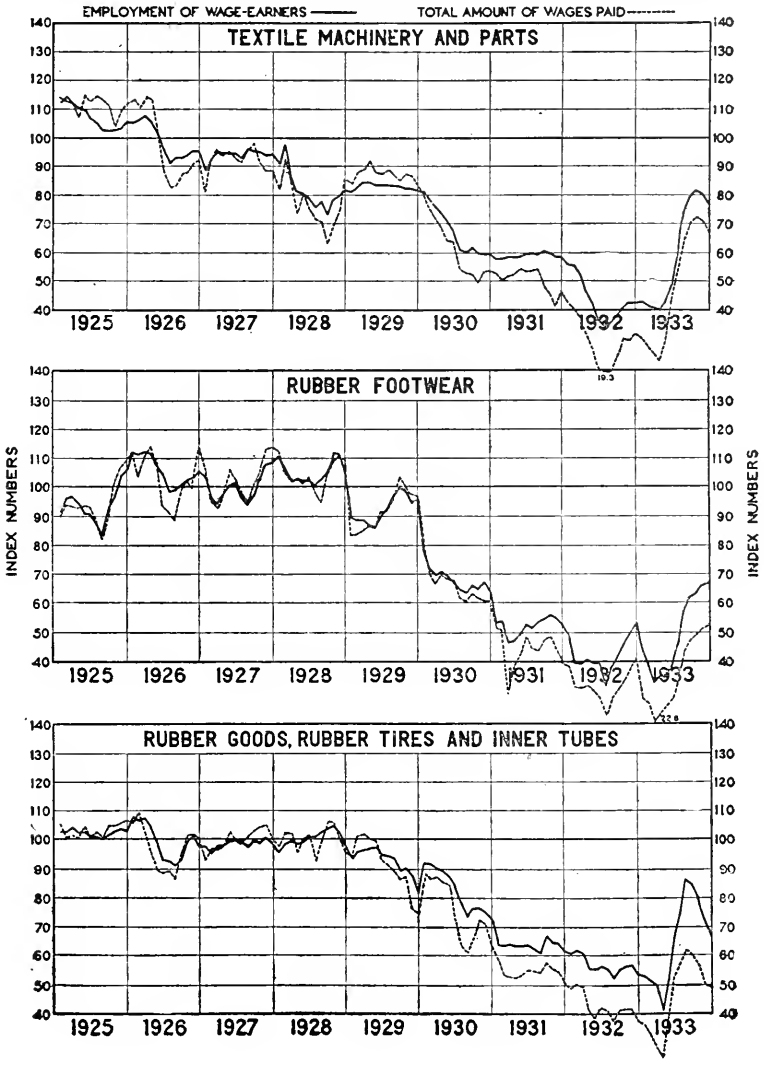


Plate 5

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933 (Continued)

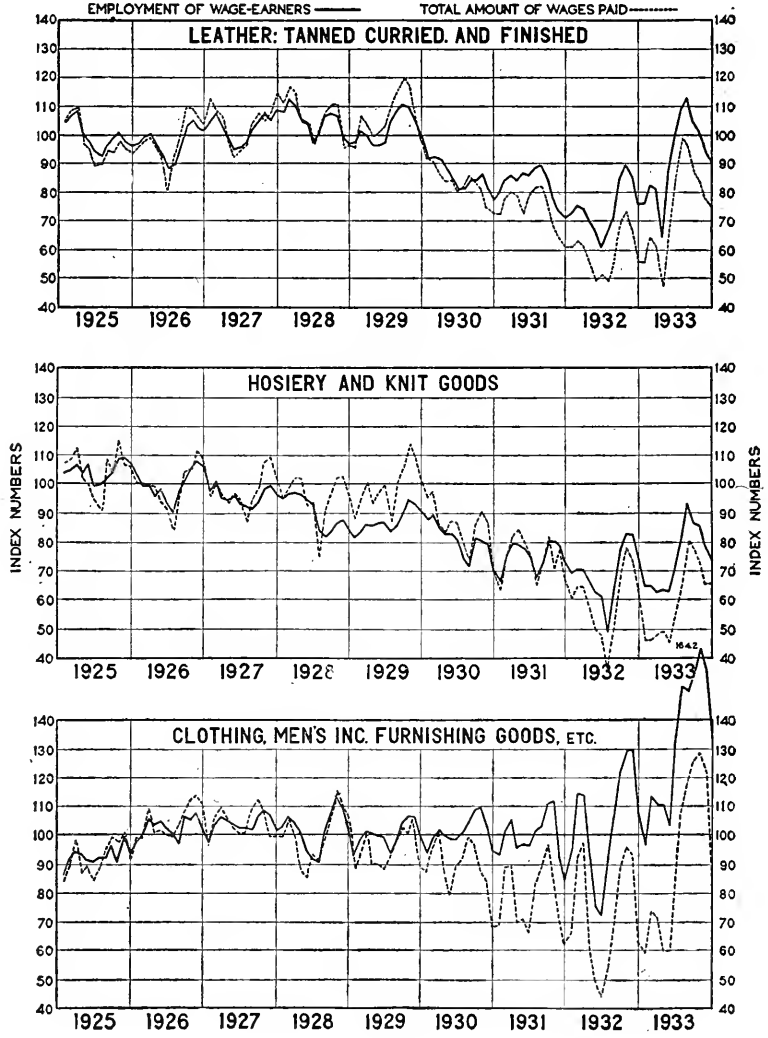


Plate 6

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933 (Continued)

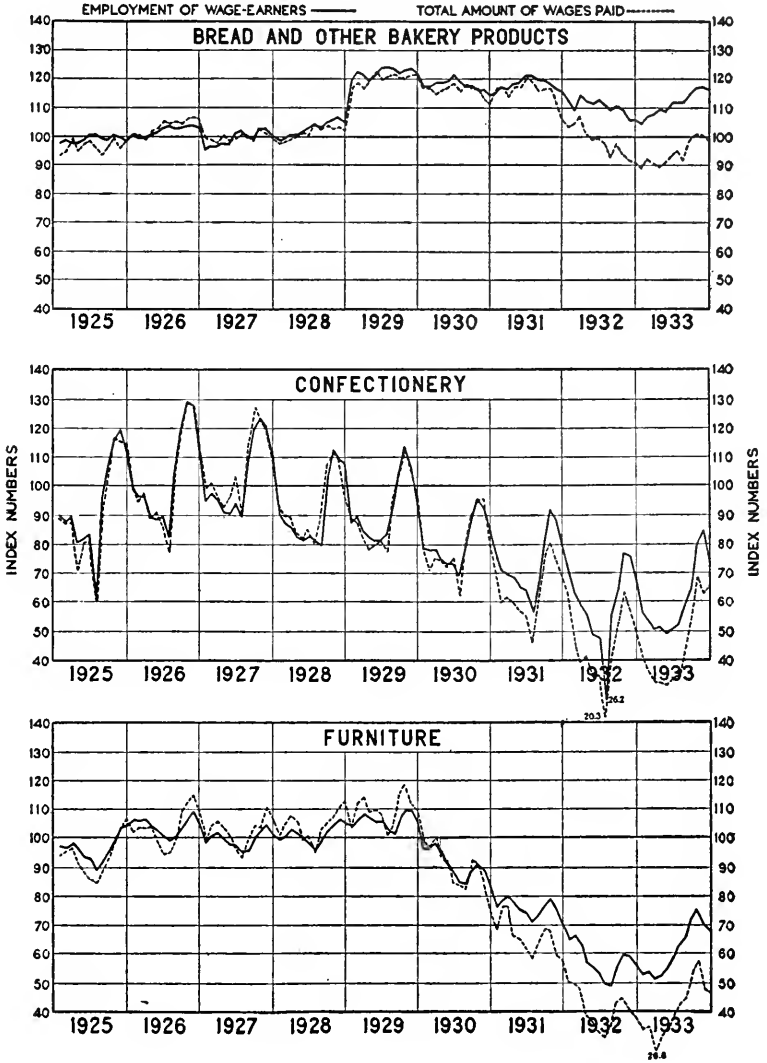


Plate 7

TREND OF EMPLOYMENT AND TOTAL WAGES PAID IN MANUFACTURING IN MASSACHUSETTS, 1925–1933 (Concluded)

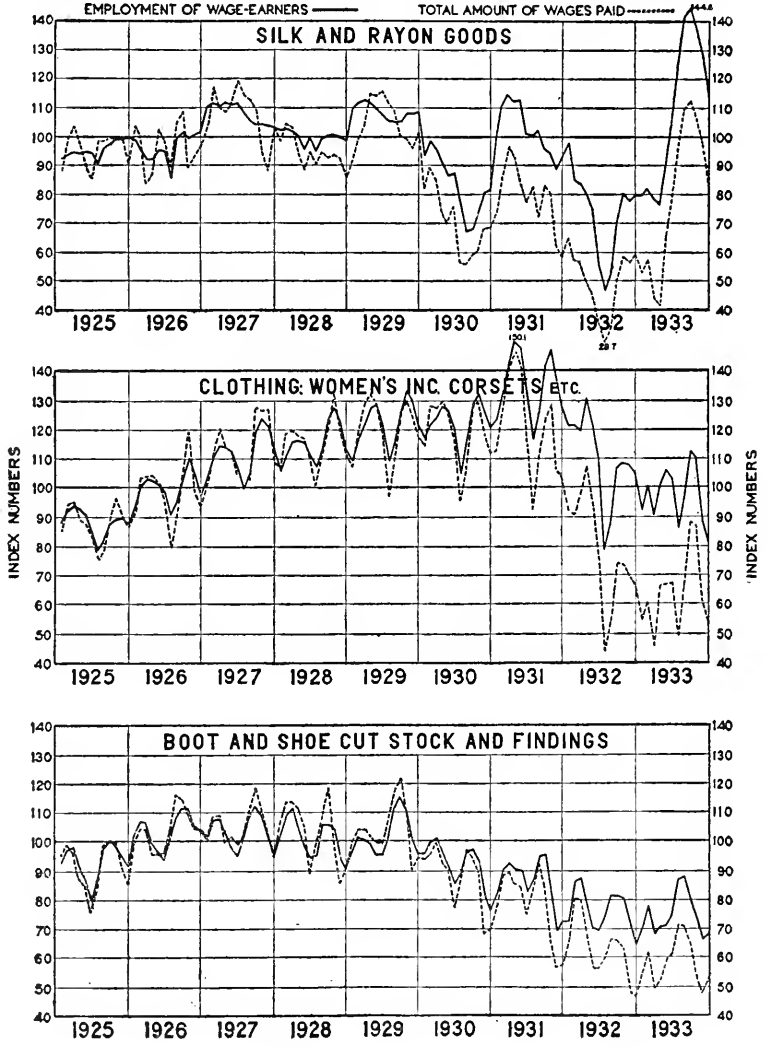


Plate 8

TREND OF EMPLOYMENT IN MANUFACTURING IN 14 LEADING INDUSTRIAL CITIES IN MASSACHUSETTS: BY MONTHS, 1931–1933

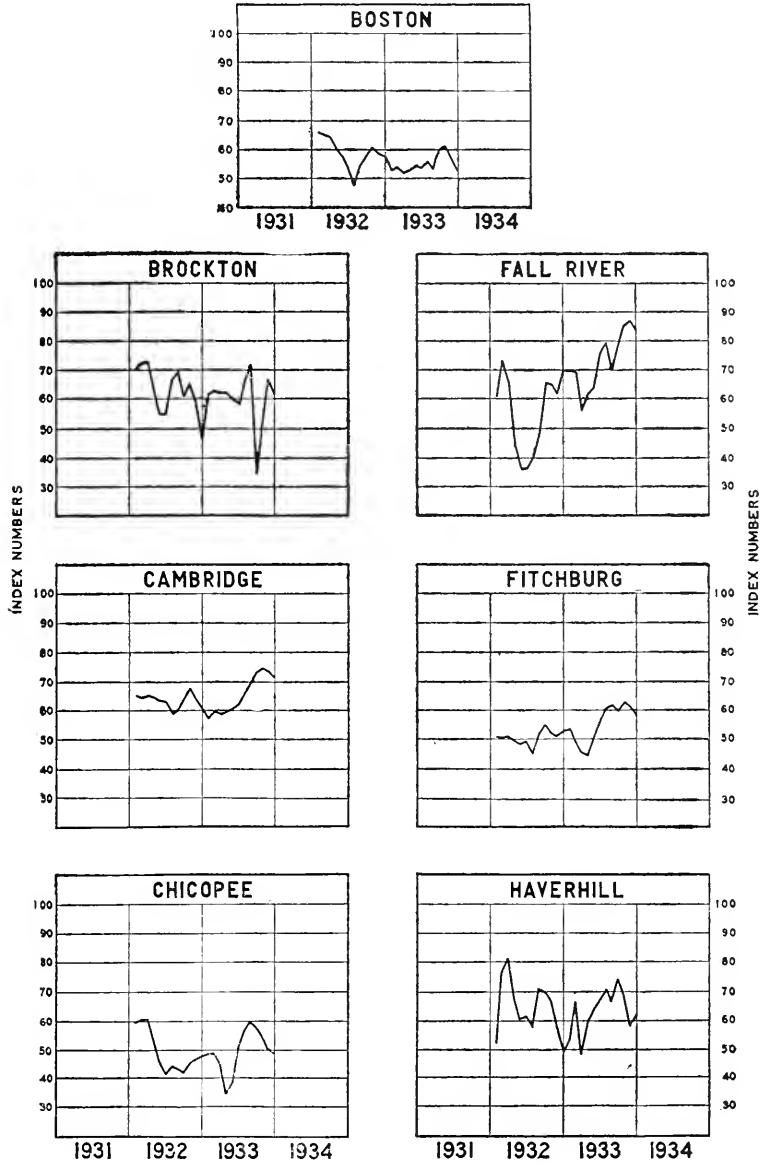


Plate 9

TREND OF EMPLOYMENT IN MANUFACTURING IN 14 LEADING INDUSTRIAL CITIES IN MASSACHUSETTS: BY MONTHS, 1931–1933 (Concluded)

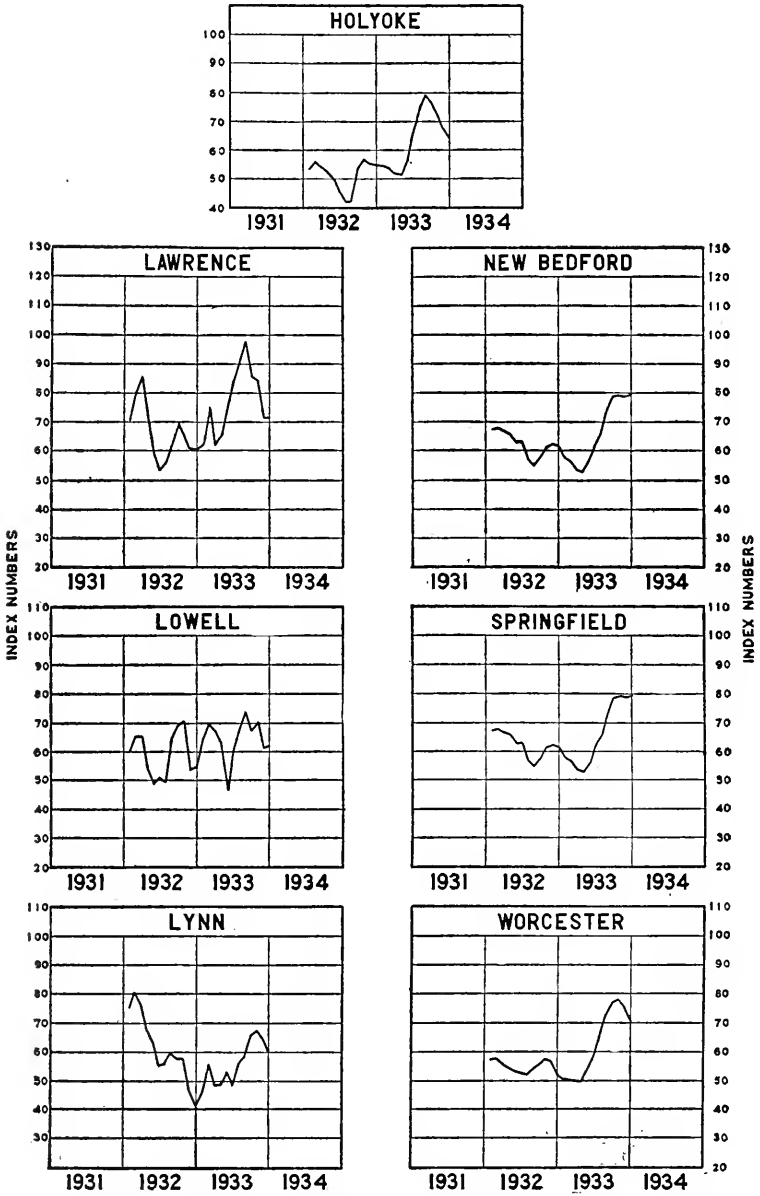


Plate 10

TREND OF EMPLOYMENT IN WHOLESALE AND RETAIL TRADE IN MASSACHUSETTS: BY MONTHS, SEPTEMBER, 1931–DECEMBER, 1933

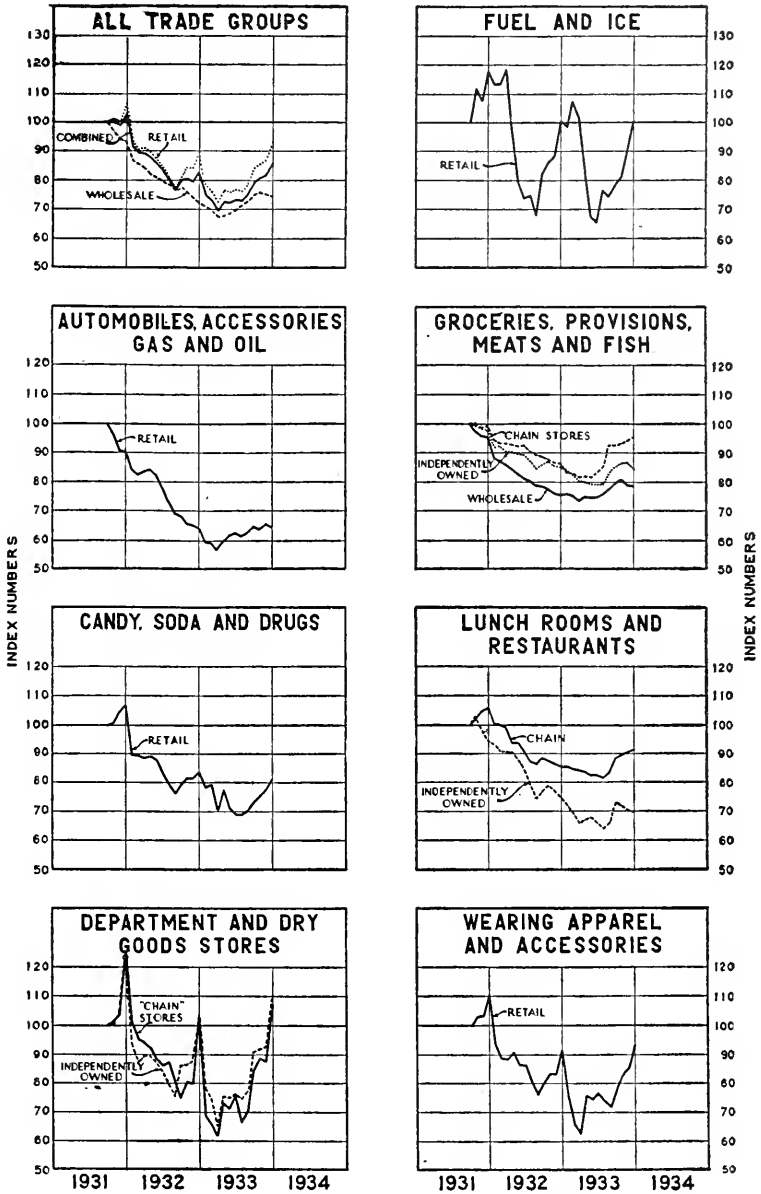


Plate 11

TREND OF TOTAL WAGES PAID IN WHOLESALE AND RETAIL TRADE IN MASSACHUSETTS: BY MONTHS, SEPTEMBER, 1931–DECEMBER, 1933

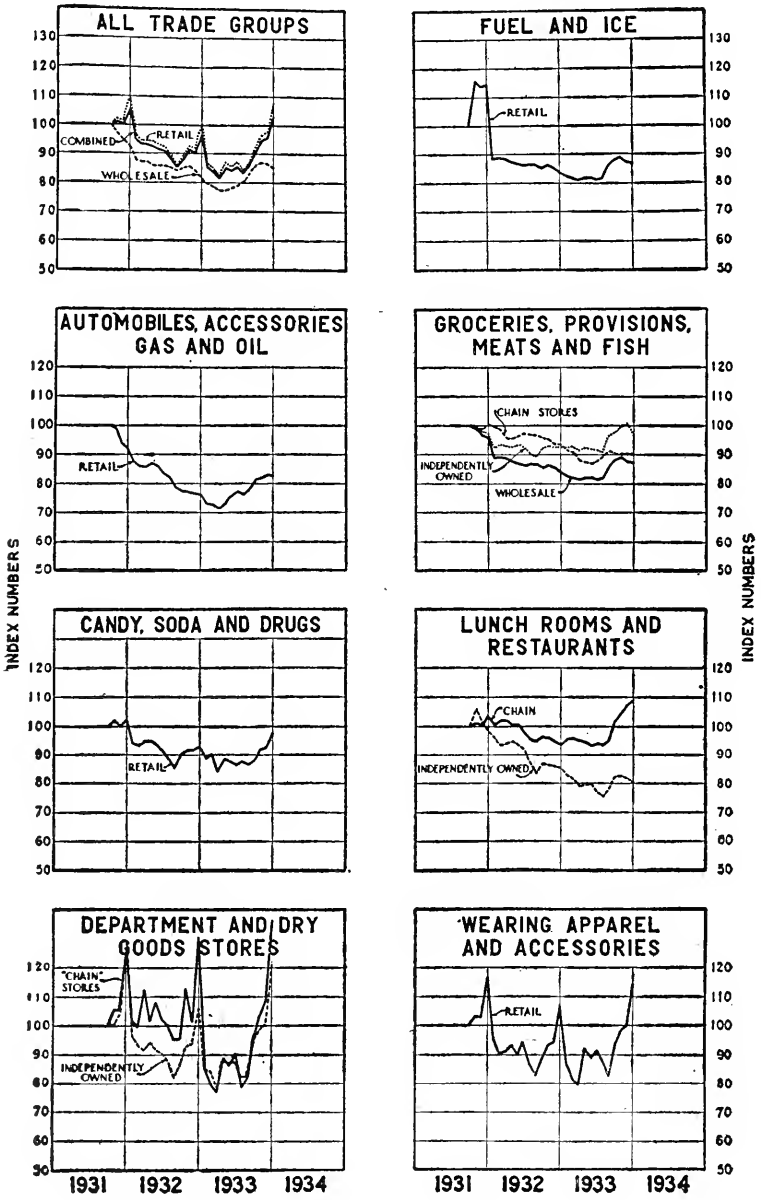


Plate 12

TREND OF EMPLOYMENT, OF TOTAL WAGES PAID, AND OF MAN HOURS WORKED IN BUILDING CONSTRUCTION IN MASSACHUSETTS, APRIL, 1927–DECEMBER, 1933

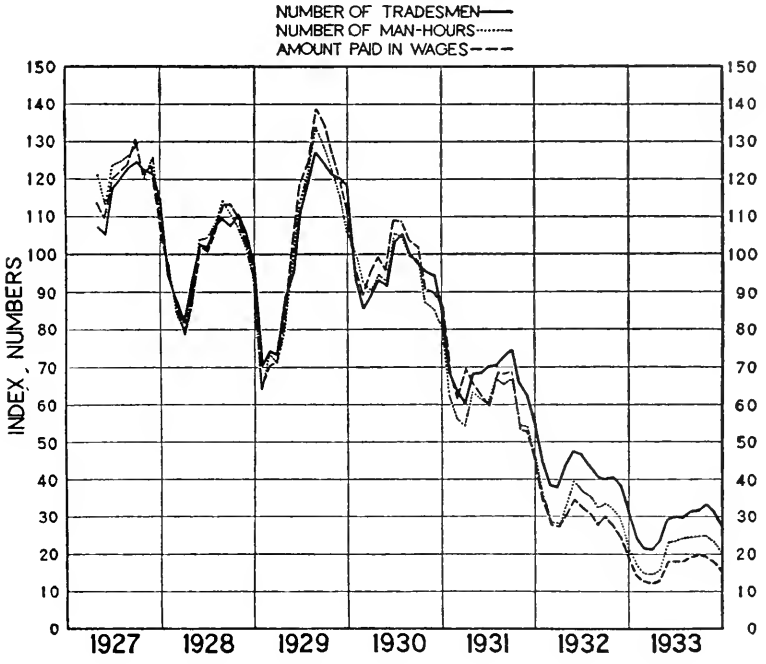


Plate 13

TREND OF EMPLOYMENT OF HIGHWAY WORKMEN IN MASSACHUSETTS, SEPTEMBER, 1931–DECEMBER, 1933

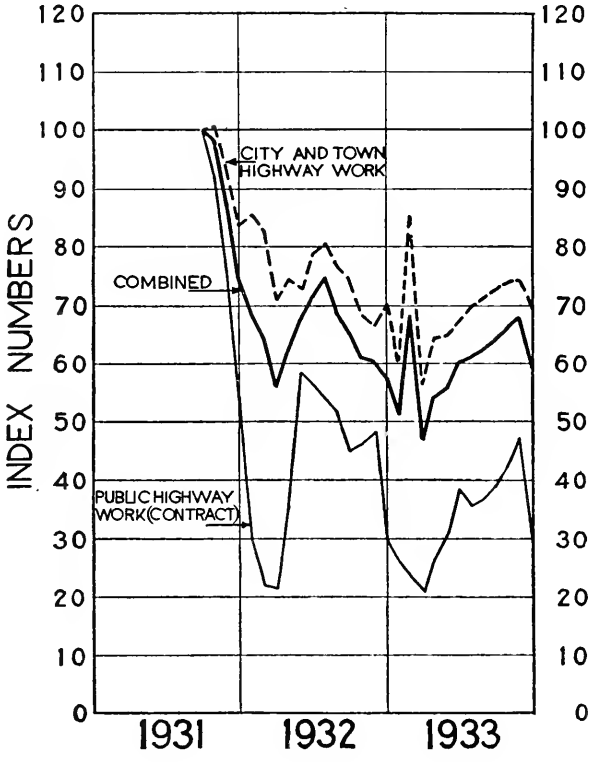


Plate 14

TREND OF EMPLOYMENT AND OF TOTAL WAGES PAID IN PUBLIC UTILITIES IN MASSACHUSETTS, 1930–1933

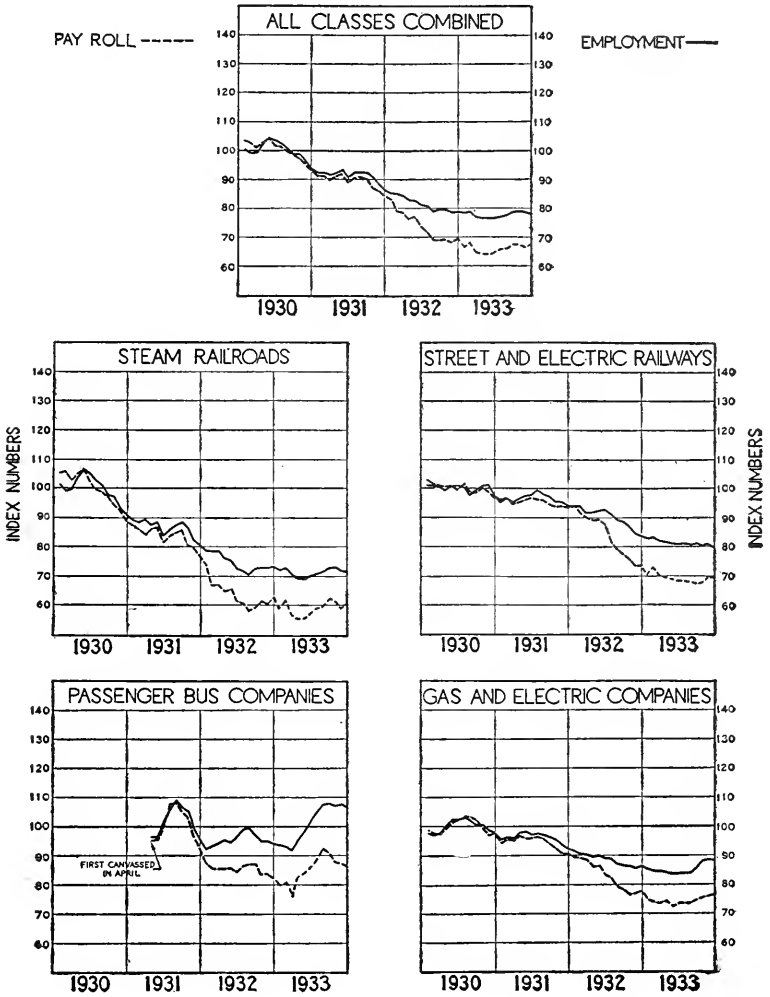


Plate 15

TREND OF EMPLOYMENT AND OF AMOUNT PAID IN WAGES IN MUNICIPALITIES IN MASSACHUSETTS, SEPTEMBER, 1931–DECEMBER, 1933

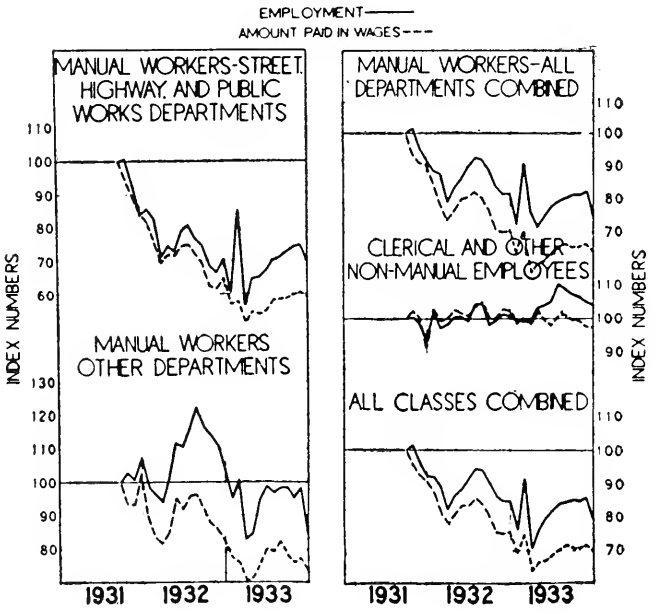


Plate 16

TREND OF EMPLOYMENT IN EIGHT MISCELLANEOUS CLASSES OF EMPLOYMENT IN MASSACHUSETTS, SEPTEMBER, 1931–DECEMBER, 1933

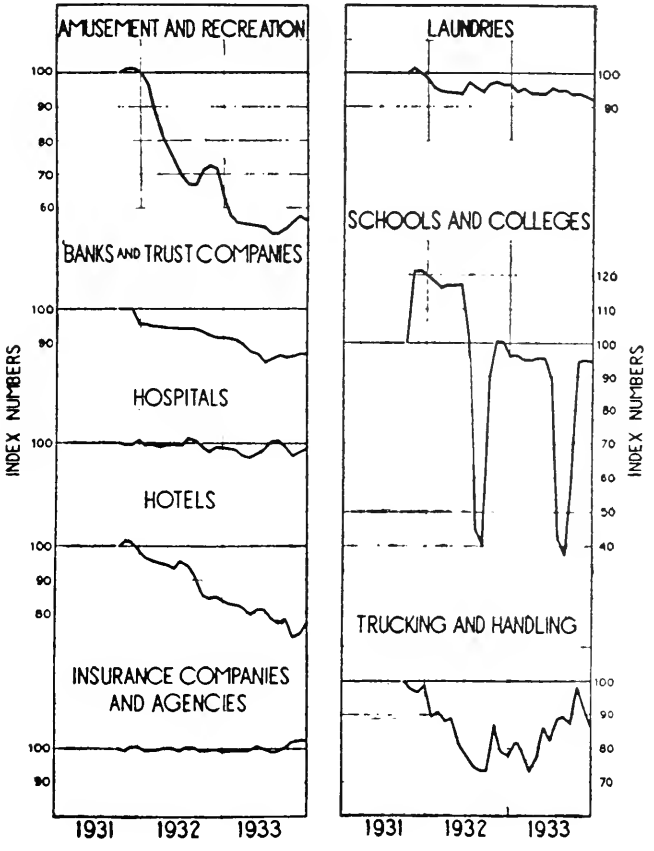
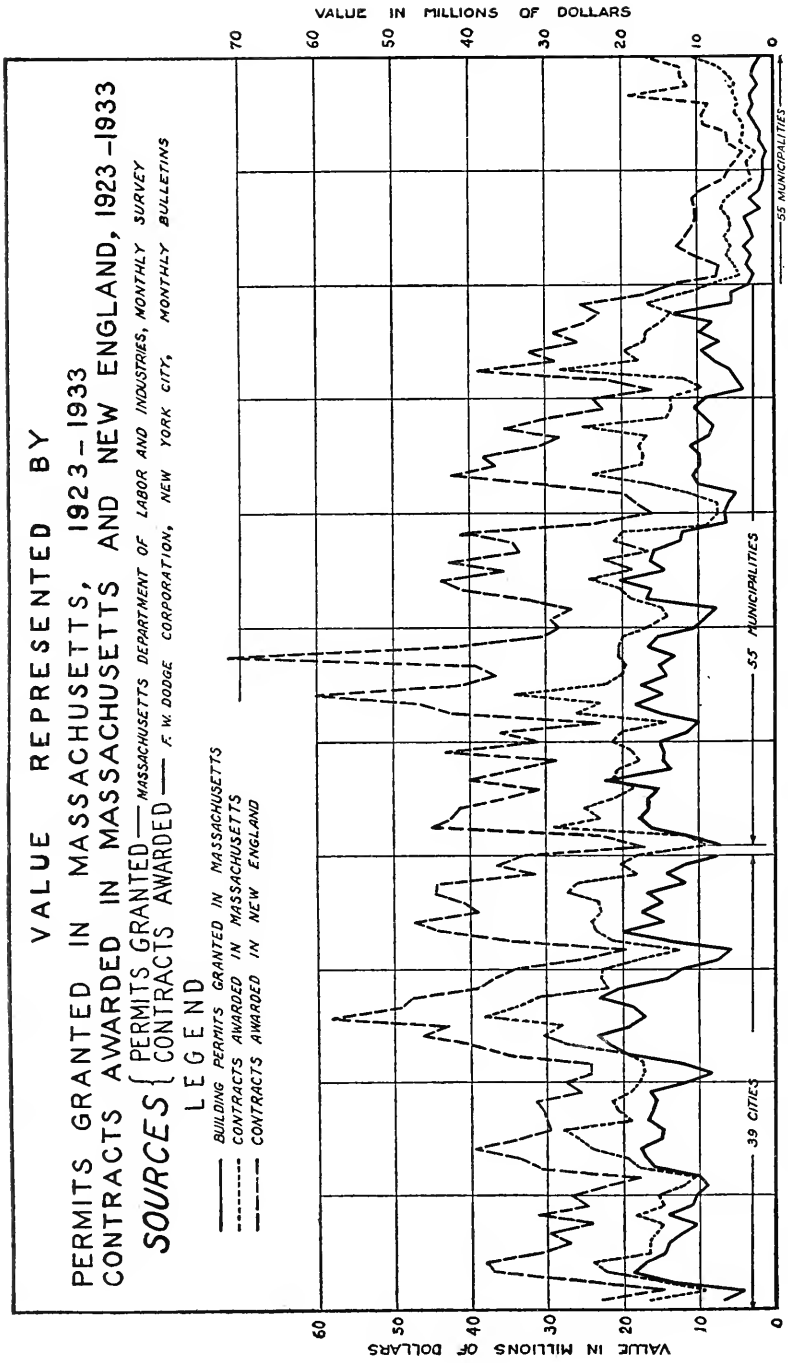


Plate 17


VALUE REPRESENTED BY
PERMITS GRANTED IN MASSACHUSETTS, 1923-1933
CONTRACTS AWARDED IN MASSACHUSETTS AND NEW ENGLAND, 1923-1933
SOURCES { PERMITS GRANTED — MASSACHUSETTS DEPARTMENT OF LABOR AND INDUSTRIES, MONTHLY SURVEY
CONTRACTS AWARDED — F. W. DODGE CORPORATION, NEW YORK CITY, MONTHLY BULLETINS
LEGEND
BUILDING PERMITS GRANTED IN MASSACHUSETTS
CONTRACTS AWARDED IN MASSACHUSETTS
CONTRACTS AWARDED IN NEW ENGLAND
VALUE IN MILLIONS OF DOLLARS
70
60
50
40
30
20
10
0
39 CITIES
55 MUNICIPALITIES
55 MUNICIPALITIES
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933

REPORT OF THE DIVISION OF PUBLIC EMPLOYMENT OFFICES

(Affiliated with United States Employment Service)

M. J. McCartin, *Director*

Introduction

This report covers the operations of the Division of Public Employment Offices, for the fiscal year ending November 30, 1933.

In addition to the general report on the activities of the Division of Public Employment Offices, statistical data relating to the work of the division during the calendar year 1933 are presented. Summary data for prior years for the purpose of comparison, together with a chart showing graphically the fluctuations from month to month in the total number of openings and placements reported by the division during the years 1924 to 1933 inclusive, are also submitted.

The opening of the fiscal year found the division without a full time Director in charge, as Mr. Roswell F. Phelps, Director of the Division of Statistics, was serving as Acting Director at the time. On February 1, 1933, Mr. M. Joseph McCartin was appointed Director by the Commissioner with the approval of the Governor and Council, and assumed charge at that time.

Development and Expansion

The year 1933 was perhaps the most important year in the history of the Division of Public Employment Offices since the inception of state public employment office activity in 1906. On June 6, 1933, Congress passed the so-called Wagner-Peyser Act (Public No. 30 — 73rd Congress) which provided for the establishment of a national employment service and for co-operation with the states in the promotion of such a system. The provisions of this Act were accepted by the General Court (Chapter 52, Resolves of 1933) and the Department of Labor and Industries designated as the agency to co-operate with full power to act.

The United States Employment Service was designated by Congress as the Federal agency to carry out the provisions of this Act. Congress also provided for the appropriation of certain sums of money to be granted to those states which accepted the provisions of the Act and which fulfilled certain minimum requirements as provided in the Act. The allotment for Massachusetts for the fiscal year ending June 30, 1934, was $38,958.44 of which $28,012.75 had been received previous to November 30, 1933.

During the summer of 1933 the Director prepared an extensive report for submission to the United States Employment Service outlining the organization and the facilities of the Division of Public Employment Offices. This report included a tentative plan of development and expansion, provided the allotment of funds to this State was actually granted.

After some changes in the report by the United States Employment Service, a plan was finally accepted and the Division of Public Employment Offices was formally affiliated with the United States Employment Service on September 13, 1933. The agreement of affiliation provides for a uniform nomenclature for the various state services throughout the country and to conform to this provision it became necessary to change the name from Division of Public Employment Offices to "Massachusetts State Employment Service (Affiliated with United States Employment Service)."

In the plan finally approved by the United States Employment Service, the opening of six new offices as soon as possible was called for, using federal funds for the purpose. These offices were planned in Greenfield, Lawrence, Lowell, Lynn, New Bedford and Pittsfield. Since the National Reemployment Service provided temporary service in communities where the permanent service was not established it was deemed advisable to delay the establishment of new permanent offices until proper quarters were secured and Civil Service lists were furnished from which the permanent appointees might be selected. Examinations were scheduled for Superintendent on December 6, 1933, and for Junior and Senior Registrars on

December 2, 1933. In the meantime the Director and the Superintendent of Buildings co-operated in an attempt to seek suitable quarters for the new offices which were to be established. However, no new offices had been set up prior to the close of the fiscal year.

Under the provisions of affiliation the Division of Public Employment Offices conforms with certain standards laid down by the United States Employment Service in such matters as personnel requirements, suitability of quarters, printed forms, statistical reports, stationery, nomenclature, etc. The franking privilege was extended to the Division which eliminates postage expense.

Also as part of the conditions of affiliation, an agreement was entered into between the Division of Public Employment Offices and the Rehabilitation Section, Division of Vocational Education, Massachusetts Department of Education, providing for co-operation between these two State agencies in the placement of physically handicapped persons in suitable jobs.

New Boston Office

Arrangements were made during the Fall of 1933 for the removal of the Boston offices from 169 Congress Street where the Trades and Labor division was located, and from 157 Federal Street where the Clerical and Technical division had its office, to the new Public Works Building at 100 Nashua Street, near the North Station. The Division was successful in securing practically the entire ninth floor and almost half the basement for the use of the Division's Boston office. The ninth floor is used for the State Administrative office and all the divisions of the Boston office with the exception of the unskilled labor division. The quarters in the basement are reserved for the use of unskilled labor.

The layout of the Boston office conforms to the minimum standards laid down by the United States Employment Service and is modern in every detail. It is arranged in accordance with many of the latest ideas of efficient service to employers and employees as developed in the experimental stations at Rochester and Philadelphia. Besides the administrative offices there are two main divisions, one for workers in industry and skilled trades, the other for clerical, professional and technical workers. A receptionist directs the applicants to the proper office, where an opportunity is afforded for a private interview with the registrar. Ample waiting room and clear directions facilitate the handling of applicants and save time. The department for laborers and casual workers, who visit the office in greater numbers and more frequently, is located in the basement.

One of the salient features of the new set-up is the opportunity offered employers to talk privately with prospective employees. For this purpose, space in the interviewing rooms has been allowed, and in the clerical and technical division, a separate consultation room is provided.

In addition to these offices the Division has further established bureaus to coordinate related activities in the several offices, to bring their work into relationship with outside groups, and to take care of special cases among applicants. These bureaus are Veterans' Placement, Junior Placement, Handicapped Placement, and the department for Co-operative Agencies, which will assist in the clearance of jobs through local non-paying agencies as well as providing for special service in connection with the technical groups furnished by the Emergency Planning and Research Bureau. State wide clearance of jobs, reporting on the labor market and on the extent of placement will be accomplished in the Department of Statistics and Clearance, while contacts with employers' and workers' groups, follow-up on placements, and publicity will be handled through the Public Relations Bureau.

In his talk during the opening ceremonies at the new location, Mr. W. Frank Persons, Director of the United States Employment Service, said, "The new offices of the State Employment Service are the best in New England, if not in the country."

Final arrangements were made for the re-location and on November 29, 1933, the day before Thanksgiving, the Boston offices on Congress and Federal Streets were closed. Friday, December 1, 1933, the new offices in the Public Works Building were opened for business.

Relocated Worcester Office

The Worcester office was moved from 23 Foster Street to 182 Commercial Street in October, 1933. The new offices are in the same building but a separate entrance just around the corner is provided. By making this move the Public Employment Office in Worcester secured about double the floor space, with departments on the first and second floors of the building. A private stairway connects the two floors.

The first floor is devoted to the men's trades and labor division while the second floor, which is also reached through the main entrance of the building at 25 Foster Street, is used for all women's divisions. The Superintendent's office, the statistical division, and the clerical and technical division are also on the second floor.

State Advisory Council

In accordance with the recommendations of the United States Employment Service, a State Advisory Council was appointed by the Commissioner to assist in widening the understanding of employers and the community in general, of the present and potential usefulness of the Division of Public Employment Offices. This council consists of representatives of employers and employees in equal numbers, and of the public.

There are three standing committees in the council, the Executive Committee, the Veterans' Placement Service Committee and the Committee on Junior Placement and Handicapped.

The Executive Committee formulates general policies for decision at the meetings of the council and acts for the council in its absence subject to the approval of the general body.

The Veterans' Placement Service Committee concerns itself with giving advice regarding the proper functioning of the Veterans' Placement Service in the Division of Public Employment Offices. Being composed of present or past state Commanders of Veterans' organizations, wholehearted interest on the part of the committee is assured.

The Junior Placement and Handicapped Placement Committee is concerned with giving advice regarding the establishment of proper facilities for junior placement work and also advising the Council in regard to the present activities and future plans of the Supervisor of Handicapped Placement Activities.

No meetings of the State Advisory Council were held prior to November 30, 1933.

The list of members and officers of the Council and of the standing Committees is given below.

Representatives of Employers		
John S. Lawrence	Boston	Chairman, Mass. Division N. E. Council
Henry S. Dennison	Framingham	Pres., Dennison Mfg. Company
Alfred E. Donovan	Rockland	Pres., E. T. Wright Shoe Co.
Lincoln Filene	Boston	Chairman of Board, Wm. Filene's Sons Co.
F. H. Willard	Worcester	Pres., Graton & Knight Co.
Representatives of Employees		
Robert J. Watt	Boston	Sec.-Treas., Mass. State Branch of A. F. of L.
John F. Gatelee	Springfield	Pres., Springfield C. L. U.
Ernest A. Johnson	Boston	Pres., Boston Building Trades Council
John R. Machado	Fall River	Pres., Fall River C. L. U.
Charles F. Sweeney	Fitchburg	Sec.-Treas., Fitchburg C. L. U.
Representatives of the Public		
Mrs. LaRue Brown	Boston	Trustee, Massachusetts Training School
Roy M. Cushman	Boston	Exec. Sec., Boston Council of Social Agencies
Leo M. Harlow	Boston	Past State Commander, American Legion — lawyer
Miss Amy Hewes	So. Hadley	Department of Economics and Sociology Mt. Holyoke College

Dr. Stanley King	Amherst	Pres., Amherst College
Paul F. Perkins	Boston	Associate Counsel, N. Y. N. H. and H. R. R.
Mrs. Katherine Shattuck	Worcester	Exec. Sec., Industrial Dept. Y. W. C. A.
Robert O. Small	Boston	Deputy Commissioner, State Department of Education
Julian D. Steele	Boston	Director, Robert Gould Shaw House
Judge Wm. M. Welch	Northampton	
Margaret Wiesman	Boston	Sec., Consumers' League of Massachusetts

Officers

Chairman: John S. Lawrence *Vice-chairman:* Robert J. Watt
Secretary: M. J. McCartin

Executive Committee

John S. Lawrence, *Chairman*
Robert J. Watt, *Vice-chairman*
Alfred E. Donovan
Ernest A. Johnson
Miss Amy Hewes
Miss Margaret Wiesman
M. Joseph McCartin, *Secretary*

Veterans' Placement Service Committee

Leo M. Harlow, *Chairman*, former State Commander of American Legion
Daniel J. Doherty, State Commander, American Legion
Walter Howard, State Commander, Veterans of Foreign Wars
T. James Gallagher, State Commander, Disabled American Veterans of World War
William Quirk, State Commander, United Spanish War Veterans

Committee on Junior Placement and Handicapped

Miss Susan Ginn, *Chairman*
Robert O. Small Fred Graham

Local Advisory Councils

Also in accordance with the agreement of affiliation with the United States Employment Service local advisory councils are planned for in order to discuss the particular problems affecting employment in the cities in which the employment service maintains offices.

Up to November 30, 1933, the only advisory council which had been appointed was that for Boston. This council also consisted of representatives of employers and employees in equal number together with representatives of the public. Members are appointed by the Commissioner. Membership of the Advisory Council for the Boston office is as follows:

Representatives of Employers

David F. Edwards	Boston	Pres., Saco-Lowell Shops
Arthur Newhall	Watertown	Pres., Hood Rubber Company

Representatives of Employees

Ernest Johnson	Boston	Pres., Boston Building Trades Council
J. Arthur Moriarty	Boston	Pres., Boston Central Labor Union

Representatives of the Public

Edward Dana	Boston	General Mgr., Boston Elevated Railway
Lincoln Filene	Boston	Chairman of Board, Wm. Filene's Sons Co.
Walter H. Neaves	Boston	Exec. Vice.-Pres., Federal Home Loan Bank

Officers

Chairman: Walter H. Neaves

Civil Works Administration

In the latter part of November, the Federal Government inaugurated the so-called Civil Works Administration program. The Division of Public Employment Offices was designated to act as the registration and referral agency for all Civil Works projects in Boston, Springfield and Worcester. This placed an unprecedented load upon the offices and taxed their facilities to such an extent that it became necessary to secure the use of the South Armory on Irvington Street, Boston, the lower floor of the Municipal Auditorium in Springfield and additional quarters in Worcester for many weeks for registration purposes. As an illustration of the abnormal increase in the number of registrations received by the Division due to the inauguration of the Civil Works Administration, attention is called to the fact that in September, 1933, the total number of registrations was 3,541 — in October 8,913 — in November 30,239 and in December 34,995. No period of the past has ever seen such responsibilities thrust upon the employees of the Division of Public Employment Offices since the establishment of the service in 1906.

It became necessary to increase the staff of all offices to a larger figure than ever before in the history of the Division. A Civil Works Administration project was set up to provide for assistance in clerical work and registration in all offices of the Division and these temporary workers were paid entirely from Federal funds. So far as can be learned the Division of Public Employment Offices functioned extremely well during this extraordinary rush and performed its duties as efficiently as the unusual conditions would permit, which efficiency was surprisingly high under the circumstances. Very little or no unfavorable newspaper comment was aroused by the service rendered by offices of the Division. A great deal of credit should go to the personnel of the Division for their faithful work during the Civil Works Administration rush. Many of them worked until late in the evening, every evening of the week and often on Sundays to keep up with the enormous amount of clerical work necessary. In no case was any provision made for additional compensation for this extra work.

Publicity

Besides the market letters which have been prepared each month and distributed to the newspapers as in the past, a leaflet was prepared and printed which contained pertinent information concerning the Division of Public Employment Offices. These leaflets were prepared for distribution to the general public at all types of gatherings, such as fairs, conventions, meetings of associations, and other events of similar nature. The Division designed and set up booths depicting the features of this service together with those of the State Department of Labor and Industries at the Brockton Fair, the Eastern States Exposition at Springfield and the Boston Food Fair and Prosperity Exposition. The attendance at these fairs aggregated well over 500,000.

A unique part of the publicity equipment possessed by the Division of Public Employment Offices is an automatic projection machine with a maximum capacity of 72 stereopticon slides. By means of caption slides and posed photograph slides, the story of the Division is depicted in a graphic manner. This machine can be quickly and easily set up at fairs, conventions, meetings of employers or other gatherings and will run continuously without attention. Past experience has shown that this machine attracted more attention and favorable comments than did the posters, bulletins and leaflets which also formed a part of the exhibits already set up.

Plans for the Future

Briefly the plans for the expansion and improvement of the Division of Public Employment Offices during the next year are as follows. Establishment of the six new offices already planned, using personnel as certified to us by Civil Service authorities, based on the examinations for Superintendent and Junior and Senior Registrars which were scheduled for December, 1933; intensive program of training of staffs in all offices; field visits to employers; establishment of a better Public Relations Division and clearance system; standardization of files and filing equipment in all offices; development of a uniform statistical procedure, including the

adoption of the daily reporting system; development of the Junior Placement Division and also the Division for Placement of Handicapped. Close attention will be paid to the development of the newly established offices and surveys conducted to determine cities in which additional offices may be located. Close cooperation is planned with the Veterans' Placement Representative in improving the procedure for the placing of veterans. Local advisory councils will be appointed for all offices and programs for their meetings and activities developed as rapidly as possible.

Statistical Summary

The principal data relative to the activities of the Division of Public Employment Offices during the calendar year 1933, with corresponding data for 1932, are presented in Table 1.

Placements. — The total number of placements during the calendar year 1933 amounted to 28,548. This number was 17,766 or 164.8 per cent greater than the number of placements (10,782) made during 1932. This abnormal increase was due in a large measure to the placement of 15,929 persons in Civil Works Administration jobs during November and December. All offices of the Division showed great increases in the number of placements. In Boston (all divisions) the increase over 1932 was 228.1 per cent; in Springfield 71.7 per cent; and in Worcester 173.1 per cent.

Openings. — During the calendar year 1933, the total number of openings (persons called for by employers) at all offices combined was 31,666 which was 18,409 or 138.9 per cent more than the number of openings (13,257) recorded in 1932. Most of this abnormal increase was due to the 16,475 Civil Works Administration openings received by the Division. The increases in the number of openings in each office were as follows: Boston (all divisions) 169.1 per cent; Springfield 67.9 per cent; and Worcester 170.0 per cent. The 31,666 openings received during 1933 resulted in 28,548 placements. This represented 90.2 per cent of the total number of openings, as compared with 81.3 per cent in 1932 and 83.1 per cent in 1931. The higher percentage in 1933 was due to the fact that all Civil Works Administration openings received by the offices of the Division were of necessity filled by these offices.

Table 1. — Summary of Business of the Division of Public Employment Offices During the Years 1933 and 1932: By Offices

Offices	1933				1932			
	Applications	Openings	Referrals	Placements	Applications	Openings	Referrals	Placements
Boston All Divisions	68,786	17,442	21,732	16,440	25,501	6,489	9,567	5,011
Springfield	11,842	6,657	7,416	6,189	4,355	3,965	4,609	3,604
Worcester	17,674	7,567	8,038	5,919	4,559	2,803	3,414	2,167
Totals	*98,302*	*31,666*	*37,186*	*28,548*	*34,415*	*13,257*	*17,590*	*10,782*

Referrals. — The total number of persons referred to positions in all offices combined during the calendar year 1933 was 37,186, which was 19,596 or 111.4 per cent greater than the number (17,590) referred to positions in 1932. Percentage increases over the 1932 figures in the various offices in 1933 are as follows: Boston (all divisions) 127.2 per cent; Springfield 60.9 per cent; and Worcester 135.4 per cent. During 1933 the 37,186 referrals resulted in 28,548 placements, or an average of 1.3 persons sent out for each position filled by the Division. In 1932 this ratio was 1.6. The lower ratio in 1933 may be attributed to the fact that most persons who were referred to Civil Works Administration projects actually went to work. This was the case largely because the Civil Works Administration authorities in Boston, Springfield and Worcester depended to a great extent on the Division of Public Employment Offices for selecting suitable personnel, and also because most of those who were referred to Civil Works positions were glad to get temporary work of this nature.

Records by Sex. — Principal data for the years 1933 and 1932 are presented by sex in Table 2 for each office separately and for all offices combined.

Of the 28,548 placements made during 1933 by all offices combined, 22,901 or 80.2 per cent were of men. In the Boston office (all divisions) placements of men made up 79.0 per cent of the total number of placements; in Springfield 87.5 per cent; and in Worcester 76.0 per cent.

Table 2. — Summary of Business of the Division of Public Employment Offices During the Years 1933 and 1932: By Offices and Sex

Office and Classification	1933				1932			
	Applications	Openings	Referrals	Placements	Applications	Openings	Referrals	Placements
Boston:								
All Divisions								
Males	51,919	13,581	16,937	12,988	16,900	4,154	6,334	3,199
Females	16,867	3,861	4,795	3,452	8,601	2,335	3,233	1,812
Totals	*68,786*	*17,442*	*21,732*	*16,440*	*25,501*	*6,489*	*9,567*	*5,011*
Springfield:								
Males	9,159	5,528	5,851	5,416	2,723	2,908	3,060	2,872
Females	2,683	1,129	1,565	773	1,632	1,057	1,549	732
Totals	*11,842*	*6,657*	*7,416*	*6,189*	*4,355*	*3,965*	*4,609*	*3,604*
Worcester:								
Males	13,320	5,204	5,491	4,497	2,602	1,504	1,702	1,309
Females	4,354	2,363	2,547	1,422	1,957	1,299	1,712	858
Totals	*17,674*	*7,567*	*8,038*	*5,919*	*4,559*	*2,803*	*3,414*	*2,167*
All offices combined:								
Males	74,398	24,313	28,279	22,901	22,225	8,566	11,096	7,380
Females	23,904	7,353	8,907	5,647	12,190	4,691	6,494	3,402
Totals	*98,302*	*31,666*	*37,186*	*28,548*	*34,415*	*13,257*	*17,590*	*10,782*

Records by Months. — In Table 3 are presented principal data for the years 1933 and 1932, by months, covering the activities of all offices combined and of each office separately. It is seen that December 1933 was by far the busiest month in either of the two years. This was due almost entirely to the Civil Works Administration, which placed an abnormal load on all offices of the Division. However, the number of openings received and placements made during each month from May, 1933, on was greater than in the corresponding months of 1932, due both to greater industrial activity and to the inauguration of public works construction financed in whole or in part by Federal funds.

Classification of Placements by Industries. — Upon the affiliation of the Division of Public Employment Offices with the United States Employment Service in 1933 the classification of data formerly used by the state offices was abandoned, and the standard classification used by all affiliated state employment services throughout the country was adopted.

The new classification is strictly on an industrial basis, whereas the one formerly used was a combination of industrial and occupational groupings. Figures classified in the new way are available only from July, 1933.

In order to make an approximate comparison on an industrial basis between the number of placements made in 1933 and 1932 it was necessary to make the following arbitrary adjustments, which, while not absolutely accurate, are sufficiently so to indicate general trends.

"Casual workers" in the old classification were split up, all the women being put in "Domestic and personal service," one half the men allocated to "Building and Construction," and the other half placed under "Transportation and Public Utilities." Where no division by sex was given, the total was divided equally among these three classifications.

"Common Labor" was assigned in total to "Building and Construction."

"Woodworking and furniture" was combined with "Lumber" to make "Lumber, furniture, and allied industries."

"Musical instruments" was combined with "Miscellaneous."

"Shipbuilding" was combined with "Metals and machinery."

"Theatre and amusements" was combined with "Clerical, Professional, and Technical."

The new classification was also adjusted, somewhat along the same lines, so that the data as finally presented in Table 4 show a fairly close approximation of the relative activity in each of these industrial groups during 1933 and 1932, in each of the cities in which the Division maintained offices.

Table 3. — Summary of Business of the Division of Public Employment Offices During the Years 1933 and 1932: By Offices and Months

Office and Month	1933				1932			
	Applications	Openings	Referrals	Placements	Applications	Openings	Referrals	Placements
All Offices Combined								
January	2,536	981	1,242	762	3,536	838	1,054	679
February	1,735	798	1,051	683	3,814	1,040	1,320	815
March	2,831	859	1,112	639	4,919	1,095	1,390	895
April	1,977	1,050	1,298	904	2,685	1,172	1,461	1,019
May	2,738	1,671	2,008	1,359	2,602	1,212	1,539	977
June	3,213	1,632	1,843	1,361	2,634	1,065	1,371	911
July	2,653	987	1,177	765	1,818	692	866	566
August	2,931	1,274	1,526	1,002	2,324	936	1,234	721
September	3,541	1,576	1,913	1,296	3,156	1,180	2,106	971
October	8,913	1,848	2,285	1,572	2,532	1,210	1,717	1,003
November	30,239	2,753	3,088	2,286	2,429	1,569	1,954	1,108
December	34,995	16,237	18,643	15,919	1,966	1,248	1,578	1,117
Totals	*98,302*	*31,666*	*37,186*	*28,548*	*34,415*	*13,257*	*17,590*	*10,782*
Boston: all Divisions								
January	1,647	514	707	388	2,320	393	522	317
February	1,223	376	547	316	2,967	464	653	331
March	1,708	340	499	258	4,248	548	777	439
April	1,199	423	601	357	1,907	526	695	451
May	1,850	784	1,014	614	1,783	562	727	429
June	2,055	618	777	533	1,889	474	673	372
July	1,370	398	498	302	1,294	284	373	219
August	1,738	477	652	406	1,693	400	596	270
September	2,213	570	783	491	2,316	621	1,416	522
October	7,244	678	1,029	602	1,842	628	960	505
November	21,483	1,203	1,251	1,144	1,810	948	1,259	584
December	25,056	11,061	13,374	11,029	1,432	641	916	572
Totals	*68,786*	*17,442*	*21,732*	*16,440*	*25,501*	*6,489*	*9,567*	*5,011*
Springfield:								
January	583	238	270	207	684	272	319	236
February	265	214	255	193	429	372	421	338
March	265	214	270	171	322	339	369	306
April	414	342	374	313	322	400	460	366
May	465	462	518	422	433	374	466	335
June	548	540	566	497	338	362	422	343
July	368	235	278	212	249	194	235	176
August	541	401	458	346	265	281	336	253
September	725	522	641	490	447	311	402	270
October	770	739	776	675	271	295	345	261
November	1,740	428	568	484	325	377	420	352
December	5,158	2,322	2,442	2,179	270	388	414	368
Totals	*11,842*	*6,657*	*7,416*	*6,189*	*,355*	*3,965*	*4,609*	*3,604*
Worcester:								
January	306	229	265	167	532	173	213	126
February	247	208	249	174	418	204	246	146
March	858	305	343	210	349	208	244	150
April	364	285	323	234	456	246	306	202
May	423	425	476	323	386	276	346	213
June	610	474	500	331	407	229	276	196
July	915	354	401	251	275	214	258	171
August	652	396	416	250	366	255	302	198
September	603	484	489	315	393	248	288	179
October	899	431	480	295	419	287	412	237
November	7,016	1,122	1,269	658	294	244	275	172
December	4,781	2,854	2,827	2,711	264	219	248	177
Totals	*17,674*	*7,567*	*8,038*	*5,919*	*4,559*	*2,803*	*3,414*	*2,167*

As indicated in Table 4, placements in the Civil Works Administration classification during 1933 formed by far the greatest bulk of the work of the Division, accounting for 55.8 per cent of the total placements. All types of labor engaged on civil works projects, whether in clerical, professional, or common laboring jobs are included in this grouping.

Building and construction accounted for the next largest group of placements in 1933, with 4,980, or 17.4 per cent of the total. This includes highway construction and other public works projects. Domestic and personal service followed with 3,358 placements, or about 11.8 per cent. All the other industrial groupings had less than 1,000 placements each.

Table 4. — Number of Placements Made by the Division of Public Employment Offices During the Years 1933 and 1932: By Industrial Groups and Offices

Occupations and Industries	1933				1932			
	Boston all Divisions	Springfield	Worcester	Total	Boston all Divisions	Springfield	Worcester	Total
Agriculture	7	291	168	466	11	137	108	256
Building and construction	2,813	1,559	608	4,980	1,656	1,289	606	3,551
Chemicals, oils, paints	18	24	13	55	7	–	–	7
Clay, glass, stone	5	11	1	17	6	–	–	6
Clerical, professional, and technical	230	45	35	310	427	144	16	587
Clothing and textiles	69	19	31	119	76	2	15	93
Domestic and personal service	872	962	1,524	3,358	857	1,003	887	2,747
Food, beverages, tobacco	42	25	4	71	67	8	2	77
Leather, rubber, and allied products	72	4	247	323	64	1	–	65
Lumber, furniture	51	3	14	68	30	17	16	63
Metals and machinery	279	187	74	540	496	87	34	617
Paper and printing	324	29	9	362	243	8	2	253
Transportation and public utilities	201	409	243	853	270	727	412	1,409
Trade	468	127	122	717	233	94	44	371
Civil Works Administration	10,856	2,347	2,726	15,929	–	–	–	–
Miscellaneous	133	147	100	380	568	87	25	680
Totals	*16,440*	*6,189*	*5,919*	*28,548*	*5,011*	*3,604*	*2,167*	*10,782*

Note: Read carefully explanation in text concerning industrial classifications.

Placement of Veterans. — The placement of veterans has been given particular consideration during 1933, because of the preference extended to them in employment on public works and civil works projects.

As shown in Table 5, registrations and placements increased markedly, due in a large measure to the civil works program of the Federal government. Registrations of veterans in 1933 amounted to 11,341, as compared with 3,565 in 1932. Placements of veterans numbered 4,774 in 1933, which exceeded by 3,422 or 253.1 per cent, the number (1,352) of veterans placed in 1932. Of the 22,901 placements of males made during 1933 in all offices combined, 4,774 or 20.8 per cent were of veterans, as compared with 18.3 per cent in 1932.

Table 5. — Number of Veterans Registered and Number of Veterans Placed by the Division of Public Employment Offices During the Years 1933 and 1932: By Offices

Offices	1933		1932	
	Registrations[1]	Placements[2]	Registrations[1]	Placements[2]
Boston (All divisions)	8,786	3,073	2,600	517
Springfield	1,214	1,236	642	725
Worcester	1,341	465	323	110
Totals	*11,341*	*4,774*	*3,565*	*1,352*

[1] Applicants for positions are registered but once each year, regardless of the number of times they apply for positions during the year.

[2] Includes duplications of individuals who were placed in more than one position during the year.

APPENDIX

Table A: Number of placements made by the Division of Public Employment Offices: by years, 1907 to 1933.

Table B: Number of placements made by the Division of Public Employment Offices: by months, 1926 to 1933.

Table C: Number of openings and placements reported by the Division of Public Employment Offices: by months, 1924 to 1933.

Table A. — Number of Placements Made by the Division of Public Employment Offices: By Years, 1907 to 1933

Year	Boston [1] Trades and Labor Office	Boston [5] Clerical and Technical Office	Boston Total	Fall River [3]	Springfield [2]	Worcester [4]	Total all Offices
Fiscal year ending Nov. 30							
1907	14,480 [1]	–	14,480	234 [3]	796 [2]	–	15,510 [6]
1908	9,941	–	9,941	2,583	2,431	–	14,955
1909	13,034	–	13,034	1,541	3,166	–	17,741
1910	15,478	–	15,478	1,421	3,675	–	20,574
1911	15,806	–	15,806	1,042	4,310	–	21,158
1912	19,554	–	19,554	1,641	5,392	–	26,587
1913	20,971	–	20,971	1,269	6,325	552 [4]	29,117 [7]
1914	15,724	–	15,724	1,125	4,685	3,176	24,710 [8]
1915	14,491	–	14,491	942	6,106	5,150	26,689
1916	19,120	–	19,120	1,348	10,999	8,398	39,865
13 months ending December 31,1917	18,747 [9]	–	18,747 [9]	383 [9]	12,344 [9]	9,681 [9]	41,155 [9]
Calendar year							
1918	18,125	–	18,125	–	12,576	9,034	39,735
1919	16,885	–	16,885	–	12,287	8,443	37,615
1920	16,910	–	16,910	–	12,044	8,566	37,520
1921	11,734	–	11,734	–	9,689	7,133	28,556
1922	13,244	1,408 [5]	14,652	–	13,968	9,849	38,469
1923	14,882	1,782	16,664	–	13,677	9,703	40,044
1924	13,037	1,529	14,566	–	10,306	7,316	32,188
1925	14,200	1,538	15,738	–	11,068	8,000	34,806
1926	14,933	1,494	16,427	–	10,252	7,615	34,294
1927	13,721	1,103	14,824	–	8,168	5,866	28,858
1928	13,052	1,656	14,708	–	8,185	5,431	28,324
1929	13,558	1,238	14,796	–	9,071	6,290	30,157
1930	8,760	798	9,558	–	5,753	4,119	19,430
1931	6,149	763	6,912	–	4,092	3,051	14,055
1932	4,373	638	5,011	–	3,604	2,167	10,782
1933	[10]	[10]	16,440	–	6,189	5,919	28,548

[1] Boston (main office) opened December 3, 1906.
[2] Springfield office opened September 4, 1907.
[3] Fall River office opened October 1, 1907; discontinued March 31, 1917.
[4] Worcester office opened September 15, 1913.
[5] Boston (clerical and technical office) opened January 9, 1922.
[6] Twelve months for the Boston office, three months for the Springfield office, and two months for the Fall River office.
[7] Eleven months for the Fall River office (closed during August) and two and one-half months for the Worcester office, opened September 15, 1913.
[8] Eleven months for the Fall River office (closed during August).
[9] Thirteen months for all offices except the Fall River office which was open for four months only, having been discontinued March 31, 1917.
[10] Statistics for all divisions of the Boston office merged upon moving to new Public Works Building.

Table B. — Number of Placements Made by the Division of Public Employment Offices: By Months, 1926 to 1933

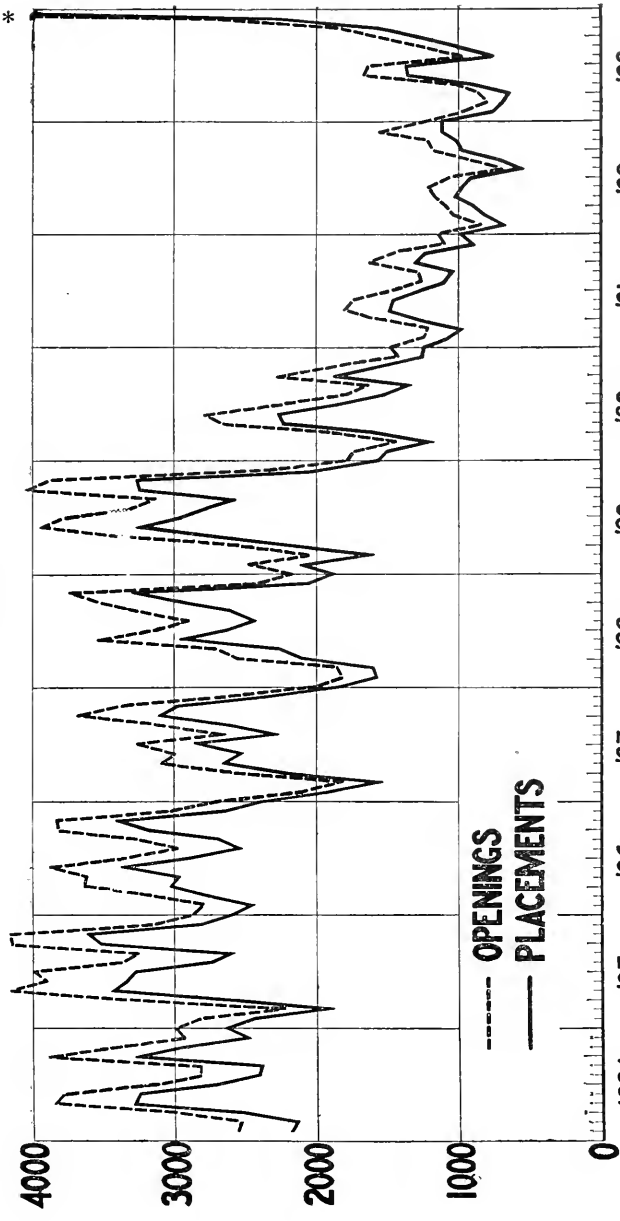
Months	1926	1927	1928	1929	1930	1931	1932	1933
				All Offices Combined				
January	2,451	1,914	1,578	2,095	1,511	1,083	679	762
February	2,762	1,552	1,605	1,620	1,210	978	815	683
March	3,020	2,225	2,105	2,091	1,580	1,261	895	639
April	2,963	2,646	2,262	2,671	2,224	1,482	1,019	904
May	3,366	2,522	2,943	3,237	2,254	1,453	977	1,359
June	2,901	2,833	2,624	2,969	1,850	1,279	911	1,361
July	2,541	2,299	2,446	2,780	1,526	1,082	566	765
August	2,691	2,615	2,586	2,593	1,354	1,032	721	1,002
September	3,175	3,089	2,947	3,239	1,859	1,303	971	1,296
October	3,395	2,974	3,279	3,256	1,573	1,232	1,003	1,572
November	2,630	2,366	2,064	2,031	1,250	888	1,108	2,286
December	2,399	1,823	1,885	1,575	1,239	982	1,117	15,919
Totals	34,294	28,858	28,324	30,157	19,430	14,055	10,782	28,548
				Boston (all divisions)				
January	1,119	993	849	1,038	773	508	317	388
February	1,108	780	813	795	578	453	331	316
March	1,547	1,140	1,145	1,065	788	634	439	258
April	1,374	1,190	1,158	1,247	1,088	700	451	357
May	1,484	1,250	1,544	1,452	1,065	757	429	614
June	1,454	1,423	1,336	1,311	893	622	372	533
July	1,181	1,204	1,294	1,381	679	494	219	302
August	1,368	1,528	1,334	1,333	669	531	270	406
September	1,678	1,713	1,497	1,674	1,015	735	522	491
October	1,674	1,566	1,794	1,640	792	614	505	602
November	1,320	1,180	1,010	1,064	594	401	584	1,144
December	1,120	857	934	796	624	463	572	11,029
Totals	*16,427*	*14,824*	*14,708*	*14,796*	*9,558*	*6,912*	*5,011*	*16,440*
				Springfield Office				
January	811	506	412	653	398	311	236	207
February	1,038	426	502	490	324	303	338	174
March	879	602	587	611	445	361	306	171
April	920	830	672	894	684	431	366	313
May	1,129	747	842	1,100	738	396	335	422
June	821	782	698	1,036	586	365	343	497
July	784	646	687	874	509	305	176	212
August	798	644	784	723	361	272	253	346
September	816	874	968	943	544	328	270	490
October	842	806	876	857	463	383	261	675
November	637	739	590	490	355	310	352	484
December	777	566	567	400	346	327	368	2,179
Totals	*10,252*	*8,168*	*8,185*	*9,071*	*5,753*	*4,092*	*3,604*	*6,170*
				Worcester Office				
January	521	415	317	404	340	264	126	167
February	616	346	290	335	308	222	146	193
March	594	483	373	415	347	266	150	210
April	669	626	432	530	452	351	202	234
May	753	525	557	685	451	300	213	323
June	626	628	590	622	371	292	196	331
July	576	449	465	525	338	283	171	251
August	525	443	468	537	324	229	198	250
September	681	502	482	622	300	240	179	315
October	879	602	609	759	318	235	237	295
November	673	447	464	477	301	177	172	658
December	502	400	384	379	269	192	177	2,711
Totals	*7,615*	*5,866*	*5,431*	*6,290*	*4,119*	*3,051*	*2,167*	*5,938*

Table C. — Number of Openings and Placements Recorded by the Division of Public Employment Offices: By Months, 1924 to 1933

Month	1924		1925		1926		1927		1928	
	Openings	Placements	Openings	Placements	Openings	Placements	Openings	Placements	Openings	Placements
January	2,555	2,178	2,816	2,443	2,787	2,451	2,092	1,914	1,809	1,578
February	2,538	2,141	2,223	1,898	3,133	2,762	1,813	1,552	1,852	1,605
March	2,991	2,520	3,157	2,601	3,630	3,020	2,571	2,225	2,554	2,105
April	3,840	3,281	4,161	3,430	3,605	2,963	3,090	2,646	2,702	2,262
May	3,768	3,246	3,901	3,335	3,868	3,366	2,993	2,522	3,532	2,943
June	3,167	2,707	3,995	3,263	3,332	2,901	3,251	2,833	3,106	2,624
July	2,820	2,409	3,364	2,745	2,972	2,541	2,628	2,299	2,895	2,446
August	2,808	2,389	3,238	2,590	3,261	2,691	3,094	2,615	3,232	2,586
September	3,888	3,258	4,144	3,510	3,810	3,175	3,676	3,089	3,536	2,947
October	3,422	2,941	4,159	3,598	3,823	3,395	3,368	2,974	3,726	3,279
November	2,925	2,484	3,156	2,809	3,026	2,630	2,613	2,366	2,409	2,064
December	2,993	2,634	2,879	2,584	2,692	2,399	2,009	1,823	2,174	1,885
Totals	*37,715*	*32,188*	*41,193*	*34,806*	*39,939*	*34,294*	*33,198*	*28,858*	*33,527*	*28,324*

Month	1929		1930		1931		1932		1933	
	Openings	Placements	Openings	Placements	Openings	Placements	Openings	Placements	Openings	Placements
January	2,482	2,095	1,737	1,511	1,245	1,083	838	679	981	762
February	2,052	1,620	1,439	1,210	1,214	978	1,040	815	798	683
March	2,561	2,091	1,908	1,580	1,574	1,261	1,095	895	859	639
April	3,404	2,671	2,657	2,224	1,795	1,482	1,172	1,019	1,050	904
May	3,928	3,237	2,787	2,254	1,741	1,453	1,212	977	1,671	1,359
June	3,772	2,969	2,248	1,850	1,495	1,279	1,065	911	1,632	1,361
July	3,315	2,780	1,775	1,526	1,260	1,082	692	566	987	765
August	3,137	2,593	1,627	1,354	1,286	1,032	936	721	1,274	1,002
September	4,042	3,239	2,265	1,859	1,625	1,303	1,180	971	1,576	1,296
October	3,871	3,256	1,882	1,573	1,444	1,232	1,210	1,003	1,848	1,572
November	2,348	2,031	1,425	1,250	1,098	888	1,569	1,108	2,753	2,286
December	1,783	1,575	1,478	1,239	1,138	982	1,248	1,117	16,237	15,919
Totals	*36,695*	*30,157*	*23,228*	*19,430*	*16,915*	*14,055*	*13,257*	*10,782*	*31,666*	*28,548*

OPENINGS FOR EMPLOYMENT AND PLACEMENTS
DIVISION OF PUBLIC EMPLOYMENT OFFICES
1924–1933



*December 1933 Openings, 16,237; Placements, 15,919.

REPORT OF THE BOARD OF CONCILIATION AND ARBITRATION

EDWARD FISHER, *Chairman*, HERBERT P. WASGATT, JOHN L. CAMPOS

On December 1, 1932, one joint application was pending. During the year 110 joint applications were filed (several of which included groups of employers), making a total of 111. Of these, 20 cases were abandoned, withdrawn or settled; decisions were rendered in 79 cases and 12 are now pending. In addition, three petitions for certificates of normality were filed.

CONCILIATION

The year 1933 has been a very exacting one, calling upon the Board for constant and continued activity in its work of conciliation and arbitration of industrial disputes arising between employers and employees. The upturn in business, accompanied by an anticipation of further improvement therein, aroused the employees in many lines of industry to an effort to recover, in part at least, reductions previously made in their wage rates and to obtain changes in working conditions and hours of employment, with the result that numerous labor controversies arose, in many instances resulting in a cessation of work. The likelihood of this occurrence was referred to in the last annual report of the Board.

The improvement in business with the consequent increase in employment, stimulated by the National Industrial Recovery Act, commonly cited as the N. R. A., with its accompanying provision relative to collective bargaining, has naturally encouraged employees through organizations to seek recognition. While naturally this has led to confusion and conflict and some serious industrial controversies, yet all in all the situation has been met by both employers and employees in a spirit of accommodation. It is to be noted that the provision relative to collective bargaining under the N. R. A. has in some instances militated against the long-continued and harmonious relationships existing between employers and union employees, notably in the shoe industry in what is commonly known as the South Shore, in Brockton and vicinity.

By reason of the serious labor controversies occurring in the shoe industry, one of the leading industries of the Commonwealth, the services of the Board have been to a considerable extent engaged in endeavoring to adjust the same. Previous to the depression, generally speaking, the shoe industry, especially in the large manufacturing centers, operated under union agreements. During the depression, however, other than on the South Shore hereinbefore referred to, the employees became disorganized and what are commonly termed open-shop conditions in these centers became common. Early in the year, however, and continuing thereafter a determined effort was made by the employees, not only to restore their organizations to their former position in these manufacturing centers but also to extend the organization of employees into communities not theretofore organized. In this respect they were undoubtedly stimulated by the collective-bargaining provision contained in the N. R. A. Under these circumstances the resulting increase in labor controversies with a cessation of work presented to the Board difficulties involving not only wage rates, working conditions and hours but also union recognition. To meet this condition a basis of agreement for settlement was instigated by the Board, which is commonly known as the "Hudson Agreement," arising out of an adjustment made in Hudson in the shoe industry.

The following is a brief history and outline of this agreement. The foundation of this method of adjusting a labor controversy was laid in 1923, when an unusual condition arose in that the Armstrong Transportation Company, although finally in accord with its employees, taxicab drivers, as to the terms upon which their relations as employer and employees were to continue, refused to sign a union agreement. A recommendation was then made by this Board that each party sign a separate agreement of the same tenor and file it with the Board, this to be recognized as an agreement by each party with the Board to fulfill and carry out its terms. This was done and the controversy thus amicably adjusted.

In Hudson a labor controversy arose in the shoe industry, the details of which will be later referred to. This controversy finally assumed the aspect that the employer and employees were in accord, or nearly so, as to the terms of a settlement except the signing of a closed-shop agreement. This the manufacturer declined to do. With the foregoing adjustment in mind, the Board made a recommendation, incorporating therein as a basis of settlement substantially the terms on which the parties were more or less in accord, without the provision for a closed shop; the agreement to be filed with the Board after being signed by the representatives of the respective parties. Under this recommendation the employees enjoyed the benefit of what might be termed the usual provision of a union agreement as to working conditions, provisions for adjusting wages and hours of labor and the privilege of shop representation. The employer in turn was afforded the guaranty of continued work without cessation through strike or other action and was not restricted in his right of employment. This basis of settlement has proved to be a fair and reasonable one for adjusting a labor controversy where the issue, often insurmountable, arises under a demand for a closed shop, affording as it does a reasonable compromise, the employees securing practically all the requests except the closed shop and the manufacturer the guaranty above referred to. The result has naturally been that the employees are represented, to a great extent if not wholly, by a union agent and a trial period is afforded during the term of the agreement for the parties, employer and employees, to become actually acquainted with and experience the results of such contractual relations.

In the following the Board outlines briefly its major activities through conciliation in adjusting labor controversies in the shoe industry.

Haverhill. A strike of the shoe operatives took place in this city on March 6, ultimately involving about 8,000 employees and practically paralyzing this industry. The demands were for increases in wages and the question of union recognition was also involved. This latter, however, was not a serious obstacle as the manufacturers as a rule were not opposed thereto. As a result of conferences of representatives of the parties it appeared that while the manufacturers were prepared to give some increase as a temporary basis of adjustment, stated to be 10%, the employees were insistent on at least a 15% increase. Efforts to compose these differences proving ineffective, the Board held a public hearing on March 21 in the City Hall in Haverhill as a part of its investigation for the purpose of placing the responsibility for the strike and its continuance. At this hearing the employees were represented by Dennis A. Kelleher, district agent, and the manufacturers' association, comprising twenty-one members, by Fred L. Cooper. Mr. Cooper, in speaking for these manufacturers, who represented so far as production was concerned but not in numbers a major portion of this industry, recognizing that there existed a great divergence in prices in the factories throughout the city and also recognizing that a readjustment in wage rates was justified, submitted the following suggestion as a temporary basis of settling the labor controversy; that a check-up be made and the manufacturers in the various grades pay the highest price for each operation which was being paid in any factory in that grade; thereby securing an equalization of prices based upon grades. It was also recognized that in many instances material increases in wage rates would follow from such equalization. During and after the completion of the hearing the Board submitted recommendations, which after further conferences and with interpretations were accepted by the parties as a basis of settlement, as follows:

> "That the employees return to work immediately in the factories in Haverhill in so far as business conditions and employment warrant.
>
> "That an investigation be commenced at once in each of the factories in which a labor controversy exists through expert assistants to be named by the locals and the manufacturers to check up the price-lists and determine what is the highest price paid on March 6, 1933, in any of these factories for each operation in the various grades.
>
> "This investigation to be made under the supervision of Mr. Cooper, representing the manufacturers, and Mr. Kelleher, representing the employees.
>
> "The experts to be sworn in and serve at the expense of the Commonwealth.
>
> "The highest price paid on March 6, 1933, for any operation in any one of these factories to be the price paid to the employees for that work, same to start with the first payroll week."

This controversy was thereby adjusted and work was resumed on March 27. The experts nominated by the parties commenced the check-up of prices under the direct charge of Mr. Cooper and Mr. Kelleher, representing the Board. This check-up proved to be somewhat more of an undertaking than was anticipated. It was finally completed the latter part of May. The Board during this period was called upon on several occasions to make rulings and interpretations on issues arising. It has been estimated that the loss in payrolls to the employees during this controversy was at the rate of approximately $150,000 per week.

Newburyport. On March 13 a strike of shoe operatives occurred in Newburyport. This strike affected about 2000 employees and was for an increase in wages and the accompanying demand for union recognition. Newburyport was what is commonly termed an open-shop town. Strong efforts were made by Mayor Morrill and other agencies to compose the differences. These efforts proving unsuccessful, the Board called a conference of the parties in the City Hall in Newburyport on March 31 and recommendations were made for adjustment. These recommendations not proving acceptable to the employees, further conferences were held and a date fixed and announced for holding a hearing to place the responsibility for the strike and its continuance. The conferences were resumed on the date set for the hearing and continued, with the result that finally an adjustment was reached and on April 8 six factories signed an agreement with the Shoe Workers' Protective Union, with a provision for arbitration of prices by the State Board.

Hudson and Marlborough. In March the employees of the Corbin-Holmes Company in Hudson made a demand for an increase in wages with an accompanying request for union recognition. The company posted notice granting an increase of 10% in wages, to be effective March 30. This being unsatisfactory to the employees they went on strike on that date. The company normally employed about 470 operatives. Conferences were held between the parties and also with the Board and as a result it was apparent that the parties were substantially in accord on terms of settlement except union recognition. This the company declined to accede to. The company, however, offered to submit the entire matter to the Board for arbitration but the employees declined to do so. As a result, having in mind the basis of adjustment reached in 1923 in the Armstrong Transportation controversy, which has been previously referred to, the Board made recommendations embodying in detail the terms of settlement without union recognition. The recommendations of the Board with some attached interpretations were finally accepted by both parties and thus the "Hudson Agreement" came into being. The employees returned to work on April 10.

A strike also occurred in the B. A. Corbin & Son Company of Marlborough on March 20, the company employing approximately 200 operatives. This company agreed to submit all the differences to arbitration, which was not acceptable to the employees, there being a demand for 15% increase in wages and a request for union recognition. The parties themselves after some conferences finally reached an adjustment on the basis of the Hudson settlement and the employees returned to work on April 14.

Lowell. In the past on several occasions unsuccessful efforts have been made to organize the employees in the shoe industry in this city. During the winter and spring such efforts were made on the part of the Shoe Workers' Protective Union. A strike occurred on April 7, accompanied by demands upon the part of the employees for increased wages, improved working conditions, etc. The strike continued for several weeks, resulting ultimately in a cessation of work by between 3000 and 3500 employees. The controversy centered on the factory of the Becker Brothers Shoe Company, Inc., employing nearly one-third of these operatives. This factory took legal proceedings by way of injunction and continued to operate for some time. However, the disturbance became so serious, resulting in outbreaks and conflicts, that this factory finally closed and the company withdrew from the city. In one other factory, the C. V. Watson Company, very few of the employees quit work but on account of the continued hostile demonstrations this company removed its factory. Few employees left at the John Pilling Shoe Company, which company also took legal proceedings and continued work without serious interruption, although there were hostile demonstrations in the vicinity of this factory. Soon after the strike Mayor Slowey designated a citizens' committee of prominent

men, who made strenuous and energetic efforts to compose the differences through conferences with representatives of the employers and of the employees. In the meantime the Board kept in close communication with the efforts being made to settle the differences, but in accordance with its established policy did not attempt to interfere or inject itself therein as long as this committee was continuing its efforts. Finally, the efforts of this committee proving unavailing, on April 27 an invitation was extended to the employees to confer with the Board at City Hall the following morning, and to the representatives of the employees to confer in the afternoon.

On April 28, at the conference in the morning only five manufacturers were represented: the United Novelty Shoe Company, Inc., the Merrimack Shoe Manufacturing Company, the Majestic Shoe Company, the Fashion Wood Heel Company and the Alden Wood Heel Company. The issues were discussed with these representatives in detail, the outstanding obstacle being the recognition of the union. In the afternoon the Board conferred with the representatives of the employees, including Mr. Nolan, the president of the Shoe Workers' Protective Union, the questions of increases in wages, improved working conditions and union recognition being discussed.

The Board on May 8 submitted to the twelve manufacturers and representatives of the employees its recommendations for the settlement of this controversy. These recommendations, however, were not accepted. The employers were unwilling to enter into a conference with the representatives of the employees. The Board, however, continued in its efforts and in the meantime his excellency, Governor Ely, conferred with the representatives of the parties in an effort to compose the differences. It seemed apparent to the Board that if any adjustment were to be made, in all probability it would have to be on the basis of the so-called "Hudson Agreement" hereinbefore referred to, and it renewed its efforts, having numerous conferences with the employers and representatives of the employees. As a final result, after joint conferences with representatives of the manufacturers and of the employees, which joint conferences the Board had finally succeeded in arranging, four factories — the United Novelty Shoe Company, Inc., the Merrimack Shoe Manufacturing Company, the Majestic Shoe Company and the Lowell Shoe Company — reached a tentative agreement which was acceptable to the employers and which the employees' committee was to submit to the employees for acceptance. At the meeting of the employees on May 24 this agreement was accepted as a basis of settlement and signed agreements were entered into by the Lowell Shoe Company, the Merrimack Shoe Company and the United Novelty Shoe Company, Inc., and the employees on Saturday, May 27, and the factories were reopened for employment on the following Monday. The Majestic Shoe Company was not represented at the meeting of May 27 but signed a similar agreement on June 10. This marked the end of a very severe labor controversy.

Athol. On March 24 a strike of the operatives of the Ansin Shoe Manufacturing Company and the Anwelt Shoe Company occurred, these two companies employing approximately 700 operatives. The agent of the Board visited Athol and endeavored to conciliate the differences. Later, however, the companies entered legal proceedings and while the legal proceedings were pending the chairman was called to Athol and conferred with the counsel and representatives of both parties. The result was that on April 21 an agreement was signed, based on the "Hudson Agreement," and the employees returned to work. The differences relative to prices were later arbitrated before the Board. The Merit Shoe Company, also of that city, employing about 400 operatives, signed a similar agreement a few days later and work was resumed.

Salisbury. On March 15 a strike of the employees of the Ruth Shoe Company in Salisbury occurred. This company had employed about 400 operatives. Various efforts were made to compose their differences and later legal proceedings were taken and an injunction issued limiting the picketing. All efforts for adjustment failing, the Board held a hearing in Salisbury on May 4 for the purpose of placing the blame for the strike and its continuance. In the meantime the Board continued with its efforts to secure an adjustment and, failing in this respect, held a further and final hearing on June 16. Further efforts to compose the differences having failed, the Board issued its report placing the responsibility for the strike and its continuance, a copy of which is contained in this report.

Brockton. For many years an agreement known as the "Stamp Contract" has existed between the manufacturers in Brockton, members of the Brockton Shoe Manufacturers' Association, and employees, members of the Boot and Shoe Workers' Union, under the terms of which all differences which could not be adjusted were arbitrated before the State Board. This contract has proved very valuable to both the employers and employees, as during a period of approximately 35 years only two major labor controversies have arisen resulting in the cessation of work, neither of which controversies had the sanction of the union officials. Recently changes were made in the organization machinery of this union in order to expedite the settlement of wage rates. This caused considerable disaffection and a large body of the workers expressed a feeling that under the collective-bargaining provision (Section 7-a of the National Industry Recovery Act) they were entitled to declare that the Boot and Shoe Workers' Union no longer represented their interests, even in face of existing contractual relations. A serious controversy followed, resulting in the fall in the cessation of work by thousands of employees in this city. Out of this controversy developed a new organization of employees known as the Brotherhood of Shoe and Allied Craftsmen, which enrolled in its membership the bulk of the employees and for the present has supplanted the Boot and Shoe Workers' Union as an active organization. The Boot and Shoe Workers' Union, however, still maintains its organization and a membership in this community.

Among the other serious controversies which have arisen is that of a strike of the leather workers in Peabody, Salem and Lynn, which occurred on March 25. This arose through the low wage rates paid in some instances and was accompanied by a further demand on the part of the employees for union recognition. In all about 8000 employees were involved. Strong efforts were made by local authorities to adjust this controversy. The Board through its agent endeavored to adjust these differences, supplementing the efforts of the mayors of the various communities. Later conferences were held in the office of the Board, with the employers on the morning of April 12 and with a committee of employees in the afternoon. At this time the Board discussed recommendations for an adjustment, but such recommendations were not acceptable to the employees and the controversy continued. Later a citizens' committee was appointed which took up the matter and was successful after very strenuous efforts in securing an adjustment through the signing of an agreement, having as its basis the "Hudson Agreement" already referred to. As a result this controversy, which resulted in serious disturbances and outbreaks, was adjusted and employment resumed May 3.

Outline and Comparison of Labor Controversies. The frequency of labor controversies leads to a conclusion that the year 1933 is a record one in this respect. While the labor controversies have greatly increased over those of the past few years, notably since 1921 and more especially since 1924, from which latter date comparatively speaking such controversies have materially declined, yet it is interesting and illuminating to note the comparison with reference to the period during the latter part of and following the World War; for instance, from 1917 to 1920, both inclusive, it will be found that the industrial conflicts between employers and employees were greatly in excess of those arising during the year 1933. Taking the records available at this office, one finds that these controversies varied, during this period from 1917 to 1920, from 433 in one year to 319 in another, averaging for the four years 391. In comparison, the labor controversies for the current year are only about one-half of this average.

Arbitration

The settlement of the many labor controversies in the shoe industry, both through the good offices of the Board and other agencies, resulted in the Board's being called upon to arbitrate prices in this industry in many centers throughout the Commonwealth. Following the settlement of the strike of shoe operatives in Lynn, Boston and Chelsea during the winter, the Board in the spring arbitrated under a joint application the prices in these factories, thirty-nine in number, rendering its decision on June 19. In addition, the Board for the first time was called upon to grade factories. Later in the summer after a labor controversy in this district, a settlement of which was made in Washington, the Board was again called

upon to arbitrate prices in forty-four factories. The duties in this respect were somewhat onerous, accompanied again with the obligation to grade the factories; nevertheless, the Board completed its work and rendered a decision, dated November 6, but by reason of the difficulties arising in the grading of the factories this decision did not become operative until November 27. Among the other centers in which the Board acted as arbitrator in the shoe industry are Athol, Hudson, Lowell, Marlborough, Milford and Newburyport.

List of Industries Affected and Principal Differences in Conciliation and Arbitration Cases

Conciliation

Industries Affected: Baking, Bedding, Building, Coal, Clothing, Cranberry, Furniture, Granite, Hat, Harvesting, Milk, Necktie, Paper, Shoe, Tanning, Teaming, Textile, Theater.

Principal Differences: Wages, Working Conditions, Discharge.

Arbitration

Industry Affected	*Issues Arbitrated*
Shoe	Wages, Working Conditions, Discharge

NORMALITY

Certificates of normality were granted to H. E. Fletcher Company of Chelmsford, Golden Leatherboard Company of Haverhill and the Methuen Heel Company of Methuen.

REPORT OF THE MINIMUM WAGE COMMISSION

Edward Fisher, *Chairman;* Herbert P. Wasgatt, John L. Campos;
Mary E. Meehan, *Acting Director*

Outline of Functions

The duties of the Minimum Wage Commission under the law comprise the following functions: investigating the wages of women employees in occupations where there is reason to believe that the wages of a substantial number are below the requirement of healthful living; establishing wage boards to recommend minimum rates for women and minors; entering wage board decrees based on the recommendations of the boards; inspecting to determine compliance with the decrees; reconvening wage boards to meet changes in the cost of living; publishing the names of employers found violating its decrees and, under the provisions of Chapter 220 of the Acts of 1933, the tagging of goods by manufacturers paying wage rates in violation of the decrees and the posting of notice by retail dealers selling goods so manufactured.

Outline of Activities

As indicated in the report for 1932, the Commission entered upon the present year with a heavy list of non-compliances in the various occupations coming under the provisions of the twenty-two decrees, by far the greater number being under the retail store decree. This situation, occasioned by reason of the continued depression, apparently reached its peak during the year. The Commission has, however, continued in its efforts for compliance through investigation, conferences, reasonable extensions and the avowed intention of resorting to publication if necessary in order to secure compliance. In these efforts the Commission has received not only the co-operation and support of numerous employers in the various occupations, but also a decisive and encouraging response from the public, insisting that employers put into effect wage rates at least sufficient to meet living requirements. Thus, coupled with an improvement in business conditions, compliance was secured in many instances and in others a most decided improvement was noted in the then existing wage rates, although not in all instances sufficient to meet the minimum rates of the decrees. While such improvement is in and of itself very reassuring, yet the Commission still faces the problem of continuing with its efforts in endeavoring to secure full compliance. Increases in wage rates have inured to the benefit not only of the employees and incidentally of the public, but also of those employers who have been anxious and desirous of complying with the decrees but have been handicapped by the unfair and unwarranted competition of other employers paying low wage rates. The enactment by Congress of the National Industrial Recovery Act, commonly referred to as the N. R. A., and the inauguration of the President's Re-employment Agreement, commonly known as the P. R. A. or temporary code, followed in turn by the adoption of permanent codes, have produced substantial improvement in business and in the conditions of the working people both by increasing employment and raising wage rates, although not in all instances, as stated above, bringing the rates to the level of the State's minimum wage decrees. With this very gratifying situation, however, have also arisen many troublesome questions and some confusion as to the relations between the codes and the minimum wage decrees.

It has been generally recognized and has been the position of the Commission from the start that the N. R. A. and codes established thereunder do not supersede or suspend the minimum wage decrees and the Commission has endeavored, through contact and co-operation with those in charge of enforcing the codes, and employers as well, to harmonize or at least minimize such differences. In the matter of hours, the minimum wage decrees are for full time employment and are based upon the number of hours per week required by the employer and permitted by the laws of the Commonwealth. Such being the case, the Commission by reason of the shortening of the weekly working period under the codes in occupations coming under the provisions of the decrees, has ruled that the minimum wage rates are to

continue to be paid for the shorter work period. Otherwise the basic principle of the minimum wage law, which is that a week's wages should be sufficient to support the employee decently, is largely nullified. Naturally some confusion has arisen and time and patience have been factors in applying and endeavoring to make effective this ruling.

Wage rates in many instances are lower under the codes than under minimum wage decrees. In this connection it must be borne in mind, as pointed out in the last annual report, that the decrees with one exception were established during a period when business conditions and wage rates generally were at a higher level, as well as living costs. The Commission is aware of this, and is also frequently reminded of the fact that one purpose of the N. R. A. and the codes is to provide fair and uniform wage rates. Nevertheless, it is generally recognized and specifically stated in some codes that where the state provides a higher wage rate than the codes, the former is to prevail.

Since the minimum wage law is recommendatory and not mandatory, the only penalty for enforcement being, previous to the enactment of Chapter 220 of the Acts of 1933, publication of the names of offenders, the contention is made by some employers, notably in the case of the chain stores, that the minimum wage decrees are not to be recognized as law. More detailed reference will be made to this contention later. However, in many instances, the differences in rates between the codes and the decrees are not great and many employers have readily and willingly continued to pay the rates under the decrees when higher.

The Commission is faced with another problem arising under the retail store decree. Under the code for the retail trade, minimum wage rates are based upon population, which basis has never been recognized under the minimum wage law of this Commonwealth, the decrees applying equally to all employees in the occupation wherever employed. While the highest minimum rates under the code are in some respects in excess of those under the state decree, nevertheless by reason of the graduation downward of the rates under the code, based upon population, the minimum code rates in all communities except Boston are not only below, but in the smaller communities considerably below the rates under the retail store decree. The code, however, in Article 6, Section 6, makes the following provisions:

> "Conflict with state laws. When any *state law* prescribed for any class of employee of either sex a higher minimum wage than that prescribed in this article, no employee of such class of either sex employed within that state shall be paid less than such state law requires."

The Commission has taken the attitude from the first, which apparently is substantiated by the provisions of this section, that the minimum rates established under the retail store decree are to be paid when they are in excess of the minimum rates under the code, and further, has understood that such was the attitude of the Federal authorities entrusted with the enforcement of the codes. Nevertheless, the contention is made by at least some of the chain stores that this section of the code does not require that the rates established under the minimum wage decree are to be paid when in excess of the minimum code rates for the reason that the Massachusetts minimum wage law is recommendatory and not mandatory, the only penalty for failing to comply therewith being publication or action taken under Chapter 220, as referred to above. Therefore, the claim is made that the decrees are not a *law* in the meaning of that word as used in Section 6, above quoted. At least one of the chain stores is asking an official ruling to that effect from the authorities at Washington. However, the Commission is continuing with its investigations under this decree and at the close of the year the results of the investigation, in so far as carried on, indicate that the chain stores as a rule in the communities outside of Boston are not complying with its decrees, although presumably complying with the code. This is a matter of serious concern and the Commission, after consultation with the office of the New England Regional District Compliance Board, is awaiting an official ruling from Washington pending taking further action. Other issues have also arisen, the details of which the Commission at this time will not attempt to enumerate.

No wage boards have been established during the year.

Home Work

For some time the Commission has been faced with the situation that in some occupations coming under the provisions of the minimum wage decrees work was being performed at home by women, and as a result the following rulings were made:

1929

"When the agents are inspecting in an establishment where home work is given out, they should explain that the decree applies to home workers as well as factory workers and should ascertain what records for home workers are kept."

1932

"Voted that employers in any occupation coming within the provisions of a minimum wage decree be required to keep a record of the females to whom any so-called home work may be given. Such record shall indicate the name, address, occupation, rate and amount paid each, and be distinct from other payroll records."

Following these rulings, the Acting Director made an investigation during the current year of the conditions and problems involved in this employment. The investigation also involved matters outside the province of the Minimum Wage Commission's work. An outline of the investigation, in so far as it relates to minimum wage, is herewith submitted, without tabulation of the statistical information secured:

Purpose. — An investigation was made during the month of January, 1933, to determine the extent and the earnings relative to work given out by factories to be done in private homes in Massachusetts.

Procedure. — A mailing list was compiled from various sources of material. Questionnaires requesting information were sent to 104 firms in regard to women engaged in home work in connection with their establishments.

Adequate Response. — Eighty-eight replies were received. Of this number, thirty-six reported the employment of a total of 455 women. The number of firms reporting discontinuance of home work was seventeen.

Localities. — The localities employing the greater number of home workers were: Boston, reporting the largest number of individual home workers, seventy-five; Worcester reported sixty; Northampton, fifty-nine; Danvers, forty-nine; and Marlboro, thirty-seven. Other cities employ lesser numbers.

Type of work. — For the most part the type of work may be included within the provisions of the Boot and Shoe Cut Stock and Findings, Brush, Knit Goods, Men's Furnishings, Muslin Underwear, Pocketbook and Leather Goods, Stationery Goods and Envelopes, and Toys, Games and Sporting Goods Decrees. The largest amounts of earnings were paid in the Pocketbook and Leather Goods, and in the Stationery Goods and Envelope industries.

Earnings and Method of Payment. — Piece rates was the general method of payment for work done by home workers. There was no way of determining the average earnings for a definite time, as records of hours were not kept. Estimates of the time required to do the work were made in a few cases by representatives of establishments. Based on these estimates, 15c, 16c, 20c, 25c, 30c, and 35c an hour was paid. It would seem that such estimates or records of time would not be worth consideration, since more than one member of the family often does the work. The earnings paid for a month or less within a recent period ranged from $1 to $543.00. In some families, where there was more than one home worker, the earnings of all were paid in a lump sum, the earnings of each worker could not be calculated. In most instances there were other sources of income. The reported earnings cannot be taken as usual, as there is irregularity in home work as in any other type of work. The earnings for the month of December were large on account of the Christmas trade.

The problem of wage rates and earnings under this type of employment is one difficult to control, especially with reference to securing definite and accurate information as to the period worked by these employees. The Commission is continuing with its endeavor to have this information correctly kept and available upon the records of the employers coming under the provisions of its decrees.

Advertisement of Non-Compliances

(*See* Table 1)

Having completed the investigation under the retail store decree, which has necessarily occupied some time by reason of the fact that a large majority of the communities had to be visited, publication was made on June 27 of the firms found to have non-compliances. This publication was the most extensive ever made by this Commission, both as to the number of firms, employees and communities affected, and also, the most expensive and was the fourth publication under this decree. This was the only publication made by the Commission during the year, as with the advent of the N. R. A. and codes in process of establishment, accompanied by a material improvement in wage rates, it seemed advisable for the present at least to defer further action in this respect.

Inspections

In addition to the regular inspection work, the Commission has made both inspections and reinspections in co-operation with the federal authorities and also in response to occasional requests of labor departments in other states, in the latter case in order to secure information particularly in regard to wage rates, hours and earnings in firms from whom goods for public distribution were in contemplation of being purchased. In addition, by reason of the numerous inquiries from employers, it has been found advisable to have the investigators acquaint themselves with the provisions of the codes in occupations coming under the minimum wage decrees in order to explain such differences as are found to arise between the provisions of the codes and the decrees, especially where the wage rates are higher or other provisions more stringent under the decrees than under the codes.

During the year the Commission has completed inspections initiated in 1932 under the following decrees: men's furnishings, muslin underwear, pocketbook and leather goods, retail stores, women's clothing and stationery goods and envelopes.

Inspection has also been initiated under the following decrees: jewelry and related lines, boot and shoe cut stock and findings, bread and bakery products, brush, candy, canning and preserving and minor lines of confectionery, druggists' compounds and proprietary medicines, electrical equipment and supplies, knit goods, laundry, millinery, office and other building cleaners, paper box and toys, games and sporting goods. Inspection has been completed in all except jewelry and related lines. In addition to the regular work there have been inspections or reinspections under each of the other decrees; as a rule either on complaint or as a check-up on the part of the Commission preliminary to publication for non-compliance.

In the regular inspection work, wage records for tabulation were secured for 36,148 women and girls in 1733 firms. An unusually large number of reinspections were made, occasioned to some extent by the N. R. A. and in co-operation with the authorities in charge thereof. In addition investigations have been made of the following occupations not coming under any decree to determine the wage rates and earnings: waitresses, 53 establishments employing 968 women; rubber shoes, 3 establishments with 704 women employees and 34 miscellaneous industries employing 1,520 women; thus making a grand total of 55,527 wage records secured in 2378 establishments.

Reinspection of Inspection Cases

Disposition of Non-Compliances Pending from Previous Years

(*See* Table 2)

At the beginning of the fiscal year there were outstanding, as appears from the report of the previous year, 10,861 cases of non-compliance in 751 establishments. To these should be added, however, 21 cases in two establishments, inadvertently omitted. Most of these came under the retail store decree, 6,152 cases in 525 establishments, a majority of which had been advertised before. There were also 711 cases in 23 pocketbook and leather goods firms; 710 cases in 28 muslin underwear establishments; 673 cases in nine jewelry and related lines establishments; 529 cases in 42 laundries; 471 cases in 34 men's furnishings establishments and 444 cases in 13 stationery goods and envelope factories. The remaining cases were divided among the following decrees: boot and shoe cut stock and findings, bread

and bakery, brush, candy, canning and preserving and minor lines of confectionery, corset, druggists' compounds and proprietary medicines, electrical equipment and supplies, knit goods, men's clothing and raincoat, millinery, office and other building cleaners, paper box, toys, games and sporting goods and women's clothing.

Adjustments. — As a large proportion of these cases were in establishments previously published, a difficult problem was presented of securing compliance. However, the Commission has been reasonably successful in securing adjustments, and in many cases where compliance was not secured, substantial increases in wage rates were made. Wages were raised to meet the provisions of the decrees in 1,025 cases in 111 establishments. Adjustments by change of work, hours or method of payment whereby the employees were enabled to earn the minimum were made in 71 cases in 31 establishments. There were 23 employees in seven establishments covered by the piece rate ruling and in 1,642 cases in 239 establishments it was reported that the employees had left or had been laid off. One hundred seventy cases in 33 establishments were reported as out of business, 50 cases in 21 establishments were incorrectly recorded, while 58 cases in eight establishments were not under the decree. Adjustment was promised or reported in 112 cases in 37 establishments, 30 cases in eight establishments were earning the minimum after being transferred to piece work. One establishment employing 14 women moved from the state; eight cases in five establishments were recorded as special license types and 358 cases of technical non-compliance were found in 56 establishments.

Advertisement. — The only firms advertised were those coming under the retail store decree including 4,163 cases in 317 establishments.

Cases Pending. — There were outstanding at the close of the year 3,158 cases in 154 establishments mainly under the jewelry and related lines, muslin underwear, pocketbook and leather goods and retail store decrees.

Disposition of New Cases Found in Firms with Cases Outstanding from Previous Years

(*See* Table 3)

In the course of reinspection of firms with cases outstanding from previous years, 3,207 new cases were found in 245 establishments. Here again the problem of the retail stores, previously referred to, comes to the front as a majority of these, 1,930 cases in 171 establishments, came under the retail store decree; the remaining cases were under the bread and bakery, electrical equipment and supplies, jewelry and related lines, knit goods, laundry, men's clothing, men's furnishings, muslin underwear, paper box, pocketbook and leather goods, toys, games and sporting goods, stationery goods and envelopes and the women's clothing decrees.

Adjustments. — As many of these cases were in establishments that had never complied, the Commission faced difficulties in endeavoring to secure adjustments. In 195 cases in 23 establishments wages were raised to meet the provisions of the decrees. Adjustment was promised or reported in six establishments employing 53 women, while ten employees in four establishments were covered by piece-rate ruling; five employees in one establishment had their hours reduced to conform with the decree and 12 employees in seven firms were reported as left or laid off. Five employees in two establishments came under the ruling of technical non-compliance.

Advertisement. — Seventeen hundred and seventy-two cases in 148 retail stores were advertised in 1933.

Cases Pending. — There were pending at the close of the year 1,155 cases in 59 establishments, mainly under the jewelry and related lines, laundry, men's furnishings, muslin underwear, pocketbook and leather goods, retail store, stationery goods and envelope and women's clothing decrees.

Disposition of Cases in the Regular Inspection Work

(*See* Table 4)

In the regular inspection work 7,932 cases of non-compliance were found in 563 establishments. While this represents a decided improvement over that of the past year both as to numbers of establishments and cases, the situation is far from satisfactory.

Adjustments. — In the cases settled wages were raised for 653 women in 90 establishments. Adjustments by change of work, hours or method of payment whereby the employees were enabled to earn the minimum were made in 41 cases in 11 establishments. Adjustment was promised or reported in 445 additional cases in 78 establishments. There were 78 employees in 16 establishments who came under the piece-rate ruling. This ruling provides that in cases of experienced operators where the great majority on a given operation are earning the minimum or over, the rates are considered to be in accordance with the decree. In six establishments 10 employees were covered by the special license provision; in 268 cases in 52 establishments it was reported that the employees had left or were laid off. Seven establishments employing 403 women were reported as out of business. There were also 58 cases in 13 establishments that did not come under the decrees; three cases in one establishment that was incorrectly recorded and 338 cases in 30 establishments that were considered as technical non-compliance.

Advertisements. — There were 45 establishments with 934 cases of non-compliance that were advertised during the year. These were under the retail store decree.

Cases Pending. — At the close of the year there were pending in the regular inspection work 4,701 cases in 281 establishments.

Conclusion

In 1921 the Commission in its annual report recommended that the Massachusetts law be made mandatory. The legislature, however, failed to enact such legislation and perhaps wisely as in 1923 the United States Supreme Court in Atkins *vs.* Children's Hospital, 261 U. S. 525, by a majority opinion held that a mandatory minimum wage law established in the District of Columbia was unconstitutional. The decision was later concurred in in several instances by both state and federal courts. However, the low wage rates, which have been referred to in this report as well as in the reports of previous years, in some lines of occupation, especially certain branches of the needle trades, have aroused public sentiment to a demand that drastic action be taken by industrial states on minimum wage legislation. As a result, the legislature at the session of 1933 passed an amendment to the minimum wage law, commonly known as the Conroy bill, being Chapter 220 of the Acts of 1933. This bill makes provision for a more effective enforcement of the minimum wage decrees through requiring the tagging of articles by the manufacturer producing the same and posting notice of sale by the dealer selling at retail, specifying that the articles so manufactured or sold are "manufactured, in whole or in part, by the labor of women and minors in violation of a decree of the Commission." The right of the Commission to proceed under this provision is subject to some limitations and thus far the Commission has taken no action thereunder. During the year 1933 a minimum wage law, based on the "model" bill of the National Consumers' League, was passed in some of the eastern states; to wit, New Hampshire, Connecticut, New York, New Jersey and Ohio. This bill imposes a criminal penalty for failure to abide by minimum wage decrees. It is to be borne in mind that the codes under the N. R. A. are at present established for a limited period only and with the desire of the great majority of employers and the public, as well as labor, for continued improvement in wage rates, it seems important that changes should be made in the Massachusetts law to encourage and assure the establishment of better wage rates. This matter, the Commission understands, is being given consideration by the Commission on Interstate Compacts, authorized at the last legislative session. The Commission, therefore, has not attempted to submit any specific recommendations for legislation, but is in accord with the enactment of legislation which will not only correct but prevent the continuance of uneconomic and anti-social wage conditions in industry and employment. It must be borne in mind, however, that in enacting such legislation provision should be made for recognition of the existing minimum wage decrees, a problem which did not have to be faced in the states heretofore referred to, which previous thereto had no minimum wage law. This could be met by special provisions without interfering in any way with the basic principle of uniformity, which is desirable in the enactment of legislation. It is also a matter worthy of consideration, if authority should not be given which will allow of decrees being modified or changed during the life of the N. R. A. and the codes adopted thereunder without the time-consuming and expensive process of summoning wage boards, so that with the

provisions of the codes, where economic conditions appear to warrant such a step, the decrees might be brought nearer into accord, thereby during the life of the N. R. A. avoiding some of the conflict and confusion which have been previously referred to in this report. A copy of Chapter 220 accompanies this report.

CHAPTER 220, ACTS OF 1933

AN ACT TO PROVIDE FOR THE MORE EFFECTIVE ENFORCEMENT OF DECREES OF THE MINIMUM WAGE COMMISSION

Section 1. Chapter one hundred and fifty-one of the General Laws is hereby amended by inserting after section eleven the following four new sections: — Section 11-A. If the commission shall at any time find, after investigation, that an employer engaged in manufacturing continues to violate any such decree, after his name has been published under section eleven, it may order such employer to cause to be affixed to every article thereafter manufactured in the course of such violation or to its container, or both, a tag, stamp, label or other device in such form, color and type as the commission may prescribe, stating the fact that such article is manufactured in whole or in part by the labor of women and minors in violation of a decree of the commission. Within ten days after the issuance of such an order to any employer he may file with the commission his objections thereto in writing. The commission shall, within ten days after such filing, suspend, amend, revoke or reaffirm such order. Refusal or failure to comply with an order of the commission issued under this section and in full force and effect shall be punished by imprisonment for not more than thirty days or by a fine of not more than five hundred dollars, or both.

Section 11–B. The commission may insert in any order issued under section eleven A, a provision that a dealer selling at retail within the Commonwealth any article to which, or to the container of which, is attached a tag, stamp, label or other device in pursuance of such an order shall keep conspicuously posted on his premises in such place, form, type and manner as the commission may prescribe, a notice that articles are for sale on said premises manufactured in whole or in part by the labor of women or minors in violation of a decree of the commission. A dealer failing to comply with such a provision shall be subject to the penalties prescribed in section eleven A.

Section 11–C. Whoever knowingly and willingly defaces, removes or destroys a tag, stamp, label or other device attached to an article or its container in pursuance of an order of the commission issued under section eleven A, or a notice posted as required in section eleven B, shall be subject to the penalties prescribed in section eleven A. The department of labor and industries shall enforce this and the two preceding sections.

Section 11–D. The commission may on its own initiative or at the request of an employer rescind any order issued under section eleven A, if after an investigation it determines such employer is complying with its decree.

Section 2. No order shall be issued by the minimum wage commission under section eleven A of chapter one hundred and fifty-one of the General Laws, inserted by section one of this act, affecting any employer in respect to wages paid by him in any occupation for which it has established a minimum wage by decree rendered prior to the effective date of this act, unless and until, in a proceeding conducted as provided in section five of said chapter one hundred and fifty-one, it shall have reinvestigated said wage and affirmed, modified or rescinded the same. (*Approved May 26, 1933.*)

Table 1. — Advertisement of Non-compliances under Minimum Wage Decrees, 1933

RETAIL STORE INDUSTRY

Date of advertisement	June 27, 1933
Number of establishments at most recent inspection	2,417
Number of records in most recent inspection	24,359
Cases of non-compliances:—	
Firms	362
Cases	5,935
Per cent of non-compliances:—	
Firms	15.0
Cases	24.4

Table 2. — Disposition of Cases of Non-compliance Pending from Previous Years

(C — Cases; E — Establishments)

Situation and Disposition of Cases	Boot and Shoe Cut Stock and Findings		Bread and Bakery Products		Brush		Candy		Canning, Preserving and Minor Lines of Confectionery		Corset		Druggists' Compounds and Proprietary Medicines		Electrical Equipment and Supplies		Knit Goods		Jewelry and Related Lines		Laundry		Men's Clothing and Raincoat	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Cases pending from previous years	5	3	14	3	4	2	214	4	13	2	32	2	3	1	133	2	239	4	673	9	529	42	80	6
ADJUSTMENTS																								
Wages raised	–	–	–	–	2	1	207	2	2	1	–	–	–	–	–	–	–	–	8	1	394	26	1	1
Left or discharged	–	–	2	1	1	1	2	1	2	1	–	–	–	–	–	–	–	–	51	3	76	20	8	1
Firm out of business	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	1	28	1
Technical non-compliance	–	–	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	28	1
Change of work, hours, or method of payment	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	1	1	–	–
Incorrectly recorded	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Covered by piece rate ruling	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	1	1	–	–
Not under decree	–	–	–	–	–	–	–	–	–	–	–	–	3	1	–	–	1	1	23	1	–	–	–	–
Special license type or similar case	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–
Adjustment promised or reported	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–
Earning minimum on piece work	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Firm moved from State	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
ADVERTISED	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
PENDING	5	3	8	1	–	–	5	1	9	1	32	2	–	–	133	2	237	3	590	8	49	11	15	3

*Includes 21 cases in 2 establishments omitted from last year's report under the men's clothing and retail store decrees.

Table 2. — Disposition of Cases of Non-compliance Pending from Previous Years — Concluded

C — Cases; E — Establishments

Situation and Disposition of Cases	Men's Furnishings		Millinery		Muslin Underwear		Office and Other Building Cleaners		Paper Box		Pocketbook and Leather Goods		Retail Store		Stationery Goods and Envelopes		Toys, Games and Sporting Goods		Women's Clothing		Total	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Cases pending from previous years	471	34	18	2	710	28	12	8	12	5	711	23	6,152	525	444	13	254	5	159	30	10,882*	753*
ADJUSTMENTS																						
Wages raised	18	6	–	–	30	6	1	1	6	3	52	6	224	46	70	7	–	–	10	4	1,025	111
Left or discharged	40	8	–	–	63	9	4	1	1	1	109	7	957	167	214	6	84	2	28	10	1,642	239
Firm out of business	–	–	–	–	–	–	–	–	–	–	3	1	84	23	–	–	–	–	48	6	170	33
Technical non-compliance	101	4	–	–	170	4	–	–	–	–	–	–	50	44	7	2	–	–	–	–	358	56
Change of work, hours, or method of payment	–	–	–	–	–	–	–	–	–	–	8	1	57	26	4	2	–	–	–	–	71	31
Incorrectly recorded	1	1	–	–	1	1	1	1	–	–	1	1	46	17	–	–	–	–	–	–	50	21
Covered by piece rate ruling	2	1	–	–	18	3	–	–	–	–	1	1	–	–	–	–	–	–	–	–	23	7
Not under decree	4	1	–	–	–	–	1	1	–	–	–	–	2	1	2	1	22	1	–	–	58	8
Special license type or similar case	3	1	–	–	–	–	–	–	–	–	–	–	2	1	1	1	–	–	–	–	8	5
Adjustment promised or reported	–	–	–	–	–	–	1	1	1	1	16	2	87	29	4	1	–	–	1	1	112	37
Earning minimum on piece work	18	5	–	–	12	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	30	8
Firm moved from State	14	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	14	1
ADVERTISED	–	–	–	–	–	–	–	–	–	–	–	–	4,163	317	–	–	–	–	–	–	4,163	317
PENDING	270	18	18	2	416	19	4	2	4	1	521	15	480	39	142	6	148	4	72	13	3,158	154

*Includes 21 cases in 2 establishments omitted from last year's report under the men's clothing and retail store decrees.

Table 3. — Disposition of New Cases in Firms where Cases were Pending from Previous Years

(C — Cases; E — Establishments)

Situation and Disposition of Cases	Bread and Bakery		Electrical Equipment and Supplies		Jewelry and Related Lines		Knit Goods		Laundry		Men's Clothing and Raincoat		Men's Furnishings		Muslin Underwear	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Number of Cases of Non-Compliance	3	1	41	1	102	4	61	1	257	27	7	2	279	9	76	9
ADJUSTMENT																
Wages raised	–	–	–	–	–	–	–	–	158	17	–	–	–	–	–	–
Left or discharged	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
Adjustment promised or reported	–	–	–	–	–	–	–	–	6	1	–	–	–	–	–	–
Hours reduced	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Covered by piece rate ruling	–	–	–	–	–	–	–	–	–	–	–	–	2	1	5	2
Technical non-compliance	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
ADVERTISED	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
PENDING	3	1	41	1	102	4	61	1	93	9	7	2	277	8	69	6

Situation and Disposition of Cases	Paper Box		Pocketbook and Leather Goods		Toys, Games and Sporting Goods		Retail Stores		Stationery Goods and Envelopes		Women's Clothing		Total	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Number of cases of non-compliance	17	2	108	7	2	1	1,930	171	254	6	70	4	3,207	245
ADJUSTMENT														
Wages raised	–	–	5	1	–	–	32	5	–	–	–	–	195	23
Left or discharged	–	–	1	1	–	–	9	4	–	–	–	–	12	7
Adjustment promised or reported	16	1	15	2	–	–	16	2	–	–	–	–	53	6
Hours reduced	–	–	–	–	–	–	5	1	–	–	–	–	5	1
Covered by piece rate ruling	–	–	3	1	–	–	–	–	–	–	–	–	10	4
Technical non-compliance	–	–	–	–	–	–	5	2	–	–	–	–	5	2
ADVERTISED	–	–	–	–	–	–	1,772	148	–	–	–	–	1,772	148
PENDING	1	1	84	3	2	1	91	12	254	6	70	4	1,155	59

Table 4 — Summary of Adjustments in Connection with Inspection in 1933 under Minimum Wage Decrees

(C — Cases; E — Establishments)

Situation and Disposition of Cases	Boot and Shoe Cut Stock and Findings [1]		Bread and Bakery Products [1]		Brush [1]		Candy [1]		Canning, Preserving and Minor Lines of Confectionery [1]		Druggists' Compounds and Proprietary Medicines [1]		Electrical Equipment and Supplies [1]		Jewelry and Related Lines [2]		Knit Goods [1]		Laundry [1]		Men's Clothing and Raincoat [3]	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Records for tabulation and establishments represented	1,141	91	1,047	48	363	13	4,255	75	1,638	85	693	43	3,293	61	2,404	56	1,820	28	5,547	380	1,380	31
Cases of non-compliance	505	65	124	14	84	4	230	13	244	38	136	11	1,264	25	47	12	107	11	548	82	342	22
ADJUSTMENTS																						
Wages raised	3	2	5	2	1	1	123	3	5	4	2	2	20	3	–	–	1	1	317	41	9	2
Change of work, hours, method of payment	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	19	2	2	2	–	–
Adjustment promised or reported	21	3	6	3	–	–	88	5	40	7	11	4	–	–	–	–	–	–	84	15	–	–
Covered by piece rate ruling	6	2	–	–	–	–	3	1	1	1	6	1	39	3	–	–	1	1	–	–	13	1
Special license type or similar case	4	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–	–
Incorrectly recorded	–	–	3	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Left or laid off	14	5	4	3	–	–	–	–	–	–	11	4	19	1	–	–	7	3	34	14	8	1
Firm out of business	–	–	–	–	–	–	–	–	–	–	–	–	382	1	–	–	–	–	8	2	6	1
Not under decree	–	–	–	–	–	–	–	–	36	11	1	1	21	1	–	–	–	–	–	–	–	–
Technical non-compliance	9	1	10	2	8	1	7	1	–	–	–	–	–	–	–	–	2	1	52	8	–	–
ADVERTISED																	–	–	–	–	–	–
PENDING	448	56	95	6	75	2	9	4	162	16	105	4	783	17	47	12	75	9	51	14	306	20

[1] Inspection initiated and completed during the year.
[2] Inspection in process at the close of the year.
[3] Completion of inspection initiated previous year also includes partial inspection under the men's clothing, men's furnishing, muslin underwear, retail store and stationery goods and envelopes decrees.

Table 4.—Summary of Adjustments in Connection with Inspection in 1933 under the Minimum Wage Decrees—Concluded

(C — Cases; E — Establishments)

Situation and Disposition of Cases	Men's Furnishings [3]		Millinery [1]		Muslin Underwear [3]		Office and Other Building Cleaners [3]		Paper Box [1]		Pocketbook and Leather Goods [3]		Retail Store [3]		Stationery Goods and Envelopes [3]		Toys, Games and Sporting Goods [1]		Women's Clothing [3]		Total	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Records for tabulation and establishments represented	1,130	14	964	39	1,501	23	2,190	363	2,861	132	316	19	1,220	160	1,348	30	813	27	224	15	36,148	1,733
Cases of non-compliance	718	16	13	4	934	21	172	25	412	59	83	10	1,219	87	449	22	235	13	66	9	7,932	563
ADJUSTMENTS																						
Wages raised	–	–	–	–	–	–	14	5	3	3	3	1	96	11	37	7	–	–	14	2	653	90
Change of work, hours, method of payment	–	–	–	–	–	–	4	2	–	–	–	–	13	3	2	1	–	–	–	–	41	11
Adjustment promised or reported	–	–	7	1	–	–	75	13	50	11	3	1	24	10	15	3	21	2	–	–	445	78
Covered by piece rate ruling	4	2	–	–	–	–	–	–	5	4	–	–	–	–	–	–	–	–	–	–	78	16
Special license type or similar case	–	–	–	–	–	–	–	–	3	1	1	1	–	–	–	–	–	–	–	–	10	6
Incorrectly recorded	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	1
Left or laid off	49	3	–	–	54	3	–	–	25	4	–	–	20	5	4	2	8	1	11	3	268	52
Firm out of business	–	–	–	–	–	–	1	1	–	–	–	–	6	2	–	–	–	–	–	–	403	7
Not under decree	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	58	13
Technical non-compliance	–	–	1	1	–	–	67	1	52	3	–	–	87	8	38	2	–	–	5	1	338	30
ADVERTISED	–	–	–	–	–	–	–	–	–	–	–	–	934	45	–	–	–	–	–	–	934	45
PENDING	665	15	5	2	880	20	11	3	274	38	76	8	39	7	353	11	206	11	36	6	4,701	281

[1] Inspection initiated and completed during the year.
[2] Inspection in process at the close of the year.
[3] Completion of inspection initiated previous year also includes partial inspection under the men's clothing, men's furnishing, muslin underwear, retail store and stationery goods and envelopes decrees.

REPORT OF THE DIVISION OF STANDARDS

JOHN P. McBRIDE, *Director of Standards*

The duties of the Director of Standards in brief are to enforce all laws relating to the use of weighing and measuring devices and giving false or insufficient weight or measure; to authorize manufacturers to seal certain devices and to assist manufacturers in standardizing their products, as well as to enforce the law relating to the licensing of hawkers and peddlers and transient vendors. This latter activity produces the chief source of income for this Division. The revenue from this source has showed a marked decrease during the past year. The principal reason therefor must be attributed to business conditions as enforcement activities were constant throughout the year, although it will be seen in a subsequent part of this report that a distinct trend has been established toward county licenses, this form of license being restricted to the goods manufactured by the licensee or his employer, it is obtained at a lower fee than other classes of license.

NEW LEGISLATION

Chapter 94, enacted during the 1933 legislative session, gives authority to this Division and local sealers of weights and measures to intercept and direct the re-weighing of material for road construction. General Laws, chapter 94, section 245, was further amended by this same chapter to establish clearly the authority of the Director and Inspectors of Standards in the matter of intercepting in transit, for the purpose of re-weighing, coke, charcoal and coal.

Chapter 120, Acts of 1933, legalizing the manufacture and sale of wines and malt beverages imposed some additional work on this Division as this commodity, under our statute defining food, is subject to the law governing the marking of quantity of contents of food in package form. Contact was promptly made with the Massachusetts manufacturers apprising them of the law and immediate compliance therewith was had. Co-operative action along these lines was obtained with the other New England states and inter-state shippers in violation were referred to the United States Food and Drug Administration Division. Some confusion was present when the wine and malt beverages business was being organized, in the matter of proper marking. In some instances, barrels and fractional parts thereof not conforming to the standards provided in our statute were found in this Commonwealth. Adjustment on the proper gallonage basis was made between the parties affected.

NEW EQUIPMENT

The Division has now acquired a portable 100-gallon test tank completely equipped with pumping unit, motor, meter and air separator, mounted on an automobile trailer. This trailer is so adapted as to be attachable to any of the Division automobiles; thus making it possible to readily transport the device to any section of the Commonwealth.

CLINICAL THERMOMETERS

Manufacturers of clinical thermometers who are authorized to affix a MASS SEAL mark upon their products are required to report to this office all sales and shipments of clinical thermometers so sealed by them. These reports indicate that during the past year such manufacturers sold and shipped 197,319 clinical thermometers of which number 104,331 were sold in Massachusetts and 92,988 in other states and in the Dominion of Canada. These figures show a material increase as compared with those of the preceding year and indicate that physicians and nurses recognize that the MASS SEAL imprint may be regarded as a guarantee of a superior degree of precision. Four manufacturers, who had been previously authorized to use seal-marks upon certain of their products, submitted applications to include several new types of thermometers within this authority. Following satisfactory inspection and tests, these manufacturers were authorized to affix their MASS SEAL mark upon 38 new or improved types of thermometers.

Laboratory Work

Calibration of Standards for Cities and Towns.

Article	Tested	Adjusted	Sealed	Condemned
Avoirdupois weights	75	20	66	9
Metric weights	2	—	2	—
Apothecary weights	2	—	2	—
Liquid measures	1	—	1	—
Totals	80	20	71	9

Clinical Thermometers

Description	Tested	Passed	Rejected	Per Cent Passed
Massachusetts seal	1,915	1,842	73	96.18
Unsealed	963	824	139	85.56

Fees amounting to $167.71 were received for the testing and certification of clinical thermometers to be offered for sale in this Commonwealth by manufacturers who had not been authorized to affix a manufacturer's seal upon them.

Cans, Cartons, and Other Containers, Measures and Weighing and Measuring Devices Submitted in Connection with Manufacturers' Applications for Approval or for Authority to Affix the Manufacturers' Seal Thereon

	Tested	Accurate	Inaccurate
Cartons for use in the sale of ice cream and other specified commodities	136	62	74
Wholesale milk cans	24	2	22
Milk jars (glass)	32	28	4
Milk jars (paper pulp)	4	—	4
Lubricating-oil bottles	3	3	—
Liquid measures	27	17	10
Coin-operated scales	5	3	2
Physicians' scales	2	1	1
Computing scales	2	2	—
Computing scale charts and indicators	6	5	1
Automatic even balance scale	1	1	—
Gum-vending machine	1	—	1
Wire-measuring machine	1	—	1
Totals	244	124	120

Miscellaneous Tests

	Tested	Accurate	Inaccurate
Automatic test-measures for gasoline pumps	13	11	2
Apothecary weights	20	—	20
Avoirdupois weights	34	23	11
Metric weights	17	11	6
Troy weights	8	6	2
Meter clock-works	1	1	—
Meter registers	3	3	—
Berry baskets	7	1	6
Steel tapes	3	3	—
Incubator thermometers	4	3	1
Prescription scale	1	—	1
Postal scale	1	—	1
Oil-dispensing devices	2	1	1
Totals	114	63	51

Other laboratory work included measurement of 23,765 yards of sewing thread and 36 yards of binding tape; screening four samples of anthracite coal to determine size; testing capacities of 12 bottles, 11 jars and 4 cartons to assist packers of various food products in determining proper labelling of quantity of contents; testing four liquid measures to assist a can manufacturer in standardizing his products; measuring one bottle of syrup and one bottle and thirteen cans of oil, and weighing one box of tea-balls to determine quantity of contents; testing person-weighing scale for State Surgeon's office; testing one egg-grading scale and one Centigrade thermometer for the Division of Markets; testing six linear measures, 25 shell fish rings, 26 brass lobster gauges and 16 game warden's measures for the Division of Fisheries and Game; two refrigerator thermometers tested; and precise weight of two clock-weights and one bottle of mercury determined.

Field Work of Inspectors

As a part of the general supervision of the work of local sealers during the past year Inspectors of Standards visited 68 cities and towns with the State test truck and tested 259 large-capacity commercial and industrial scales. These tests revealed errors which could not be discovered by use of the average sealers' working equipment and showed the necessity of repairs or replacement in many instances.

Some of the causes of error noted in the incorrect scales were as follows:— poor foundations, broken or cracked pivots, rotten timbers, defective steel (due to wear), improper installations, dirty pivots and bearings, lack of proper adjustments. This co-operative work received much favorable comment from the sealers, scale users and scale manufacturers and will, undoubtedly, result in improvement in the conditions surrounding the use of large capacity scales.

The following compilation shows some other phases of the inspectors' work:—

Number of Inspections: — Stores, 1,128; gasoline pumps, 262; peddlers, 797; transient vendors, 383; net weight markings, 97; coal weight certificates, 53; bread-weight markings, 39; ice scales and price lists, 6; total, 2,765.

Weighing and Measuring Devices. Sealed, 7,459; unsealed, 2,006; total inspected, 9,465. Accurate, 1,678; inaccurate, 198; total tested, 1,876.

Clinical Thermometers. Sealed, 325; total inspected, 325.

	Reweighings			
Commodity	*Number*	*Correct*	*Under*	*Over*
Coal (loads)	52	11	18	23
Coal (bags)	9	7	2	—
Turkeys	6	5	1	—
Packages of food, etc.	6,530	3,531	970	2,029
Totals	6,597	3,554	991	2,052

	State Institutions			
Article	*Tested*	*Adjusted*	*Sealed*	*Condemned*
Scales	451	97	424	27
Weights	1,271	63	1,255	16
Height measures	2	—	2	—
Liquid measures	9	—	9	—
Gasoline pumps	20	3	18	2
Oil pumps	1	—	1	—
Totals	1,754	163	1,709	45

The inspector's field work also included inspection and tests, under varying working conditions, of 43 gasoline, fuel oil and grease measuring devices submitted by manufacturers for approval of type under section 29, chapter 98, General Laws.

There were 51 applicants for certificates of fitness for appointment as measurers of leather examined, 10 of whom failed to qualify while certificates were issued to 41 who passed a satisfactory examination.

Complaints Investigated

There were 141 complaints referred to inspectors for investigation. These complaints involved violations of the hawkers' and pedlers' and transient vendors' license laws, giving insufficient weight or measure, and sale of coal containing an unreasonable amount of foreign substances. Three prosecutions followed investigation of these coal complaints, resulting in the payment of $100 fine by a wholesaler, while the retailer, to whom some of this coal was delivered, pleaded nolo and his case was filed. The other case was based upon possession of inferior coal in paper bags, the defendant pleading nolo and the case being filed by the court.

Prosecutions

As shown by the following summary, there were 33 complaints prosecuted in the courts during the year. Conviction resulted in 27 cases, 6 pleaded nolo, and one defaulted. The final disposition of many of these cases was, however, rather disheartening to the prosecuting inspectors as 16 cases were filed in the lower courts and, in four appealed cases, the fines imposed in the lower courts were substantially reduced upon pleas of guilty in the Superior Courts to avoid the time and expense involved in jury trials.

Court Cases

Nature of Offence	Number of complaints	Convicted	Defaulted	Pleaded nolo	Filed	Fines imposed	Appealed
Insufficient weight in sale of matzos [1]	2	–	–	2	2	–	–
Insufficient measure of flavoring extracts	1	1	–	–	–	$10	–
Possession of false scale	1	1	–	–	–	10	–
Possession of unsealed scale	1	1	–	–	–	10	–
Delivery of coal containing unreasonable amount of foreign substances [2]	2	1	–	1	–	100	–
Possession of paper bags containing coal of inferior quality	1	–	–	1	1	–	–
Conducting transient business without license	9	7	1	1	1	155	3
Peddling without license: —							
Bakery products	3	3	–	–	1	10	–
Fruit and vegetables	1	1	–	–	–	20	–
Ice cream	1	1	–	–	1	–	–
Pennants, etc.	2	2	–	–	2	–	–
Soap, etc.	5	5	–	–	5	–	–
Furnishing goods to unlicensed minor	1	1	–	–	–	25	1
Employing minor to peddle without license	2	2	–	–	2	–	–
Permitting minor to peddle without license	1	1	–	–	1	–	–
Totals	33	27	1	5	16	$340 [3]	4

[1] As a result of these prosecutions, manufacturers of matzos, sold chiefly during the Jewish holidays, have jointly agreed to ship only standard weight packages to this Commonwealth in future.

[2] Practically all of the cargo of coal involved in this case was shipped out of the Commonwealth following the trial.

[3] Disposition of appealed cases in the Superior Courts reduced total fines to $190.

Office Work

Weighing and measuring devices approved as to design and construction under section 29, chapter 98, General Laws, included 2 automatic counter scales, 3 computing scales, 1 physicians' scale, 1 spring scale, 43 grease-measuring devices, 3 portable gasoline pumps, 1 gasoline meter, 1 bulk storage meter system, 8 truck-tank meter systems, 3 pre-determined truck-tank meter systems, 67 retail gasoline-meter systems, 1 computing gasoline meter system, and 9 liquid measures.

Under section 283, chapter 94, General Laws, 3 coin-operated person-weighing scales were approved by the Director.

Under section 13, chapter 98, General Laws, three manufacturers were authorized to affix the manufacturers' seal-mark upon 38 additional types of clinical thermometers.

Under section 15, chapter 98, General Laws, two manufacturers were authorized to seal certain milk jars of their manufacture.

Under section 18, chapter 98, General Laws, two manufacturers were authorized to seal certain wholesale milk cans of their manufacture.

Under section 22, chapter 98, General Laws, paper or fibre cartons submitted by three manufacturers were approved for use as measures in the sale of certain specified commodities.

Under section 14A, chapter 98, General Laws, one manufacturer of lubricating-oil bottles was authorized to seal such bottles.

Under section 3, chapter 101, General Laws, $500 in cash was deposited and surety bonds aggregating $149,000 were filed with the director by applicants for transient vendors' licenses, to be subject to legal claims incurred in connection with the transient business conducted under such licenses.

As shown by the detailed financial statement included elsewhere in this report, a total of $105,943.06 was received from all sources, including fees for hawkers' and pedlers' and transient vendors' licenses, transfer fees and fees for testing clinical thermometers.

Licenses

Transient Vendors

There were 299 transient vendors' licenses issued and the fees received therefrom amounted to $7,475. In 1932, there were 472 transient vendors' licenses issued and $11,800 received in fees. Although the general business conditions contributed to this condition, it is probable that this decrease was also to some extent due to an opinion rendered by the Attorney-General on June 30, 1932, to the effect that the words "each year," in the definition of "transient business" in section 1, chapter 101, General Laws, does not mean each *calendar* year. Previous to this opinion, enforcing officers relied upon the definition of the word "year" as appearing in section 7, chapter 4, General Laws: — "Nineteenth, —— 'year,' a calendar year," and any business commenced after April first in any year was considered as coming within the statutory definition during the remainder of the first year, this period being less than the nine months during which the place should be kept open to be exempt from license.

Hawkers and Pedlers

There were 4,330 hawkers' and pedlers' licenses and 976 transfers of licenses for which fees were received, as compared with 4,841 issued and 1,631 transferred in the preceding year. Special licenses were issued without fee to 629 disabled veterans of the World War, 35 less than were issued in 1932.

Since the enactment of chapter 349, Acts of 1929, there has been a marked annual decrease in the number of applications for the various forms of hawkers' and pedlers' licenses, with the sole exception of county licenses which increased from a total of 497, in the year before that enactment, to the number of 1,867 in the past year. By this legislation the statute was amended so as to provide for issuance of county licenses for the sale of goods manufactured by the licensee or by his employer, whereas previously such licenses were granted only to the manufacturer of the articles to be pedled thereunder. As a result, the receipts for county licenses show an increase of $14,454 in 1933, as compared with 1928, while in the same period receipts for state licenses show a decrease of $19,950; for city licenses, a decrease of $8,003; and for town licenses, a decrease of $3,613. As the entire expense of enforcement falls upon the Commonwealth and the various cities and towns in which these pedlers may operate, it is evident that the amended law benefits the counties, while materially decreasing the income received by the Commonwealth and municipalities from license fees. The lack of purchasing power prevailing amongst those upon whom pedlers were wont to depend for patronage also contributed toward a diminution of the number of pedlers, as shown by the failure of many licensees to renew their licenses after the expiration date.

Educational and Co-operative Activities

While for reasons of economy the publication of bulletins and other printed information was suspended and the annual session of the National Conference was again omitted, co-operation with officials of other states and of the National Bureau of Standards was continued through exchange of communications and personal visits of some of these officials. Many queries from teachers and students of home economics were received and answered. Following repeal of the Prohibition Amendment, conferences were held with representatives of the brewers, distillers and bottlers relative to compliance with legal requirements as to marking of quantity of contents on all containers of wines and alcoholic beverages.

The Director attended conferences of the State Fire Marshal and representatives of manufacturers of tanks to be used in the storage and sale of gasoline and other volatile and inflammable liquids. He addressed the Lynn Chamber of Commerce on May 8, the Essex County Associated Boards of Trade on June 14, and a class of Boston University students on August 29, his subject in each case being the activities of this division in co-operation with local officials in the enforcement of laws relating to hawkers and peddlers and to transient vendors and those relative to the sale of food, fuel and other commodities ordinarily sold by weight or measure.

With all inspectors he attended the annual convention of the Massachusetts Association Sealers of Weights and Measures, at which the Commissioner of Labor and Industries was also a guest speaker. The director also attended an informal regional meeting of local sealers held at Salem, November 20, for discussion of matters of interest. Many instances of co-operation with other state departments are detailed under the heading of "Laboratory Work."

Local Sealers of Weights and Measures

Following is a summary of work performed by sealers of weights and measures in cities and towns as compiled from annual reports required by section 37, chapter 98, General Laws, to be filed with the Director between the first and tenth of December in each year. The sealers in the towns of Hancock, Tolland, and Tyngsborough failed to comply with the provisions of the aforementioned statute, and therefore this summary does not include any work performed in these towns.

Summary of Local Sealers' Work

Article	Adjusted	Sealed	Non-sealed	Condemned
Scales				
Platform (over 5,000 lbs.)	459	2,491	76	145
Platform (100 to 5,000 lbs.)	4,285	20,857	803	590
Counter (100 lbs. or over)	196	1,464	29	67
Counter (under 100 lbs.)	1,790	15,565	339	269
Beam (100 lbs. or over)	170	1,587	76	63
Beam (under 100 lbs.)	33	630	7	16
Spring (100 lbs. or over)	237	5,161	73	360
Spring (under 100 lbs.)	3,810	27,613	239	1,164
Computing (100 lbs. or over)	198	650	4	37
Computing (under 100 lbs.)	4,273	22,558	213	1,070
Person-weigher (slot)	137	4,133	286	35
Prescription	167	1,840	11	41
Jewellers'	4	114	6	3
Totals	15,759	104,663	2,162	3,860
Weights				
Avoirdupois	6,003	124,893	1,009	492
Apothecary	259	20,482	—	291
Metric	107	8,041	254	47
Troy	80	1,921	60	5
Totals	6,449	155,337	1,323	835
Capacity Measures				
Vehicle tanks (compartments)	1	2,202	—	25
Liquid measures	228	37,270	231	551
Ice-cream cans	11	5,334	—	43
Glass Graduates	—	575	—	16
Oil bottles	—	17,724	35	117
Milk jars	—	277	—	19
Dry measures	—	883	—	24
Fuel baskets	—	1,350	—	30
Totals	240	65,615	266	825

Article	Adjusted	Sealed	Non-sealed	Condemned
Automatic Measuring Devices				
Gasoline Pumps	2,623	14,594	1,011	1,007
Gasoline and Oil Meter Systems	3,821	11,906	58	866
Kerosene Pumps	222	3,173	581	100
Lubricating-oil Pumps	2,910	11,842	7,638	217
Grease Measuring Devices	324	988	11	91
Molasses Pumps	47	551	223	1
Quantity stops (on measuring pumps)	6,154	85,763	65	22
Leather measuring machines	—	273	—	15
Totals	16,111	129,090	9,587	2,319
Linear Measures				
Yard sticks	5	6,581	—	82
Tapes	—	94	—	7
Taximeters	470	2,274	—	23
Cloth-measuring devices	—	789	—	15
Totals	475	9,738	—	127
Grand Totals	39,034	464,443	13,338	7,966

Sealing fees collected	$54,266.88
Adjusting charges	5,728.16
Total collected	$59,995.04

Reweighings and Remeasurements

Commodity	Number of Reweighings, etc.	Correct	Under	Over
Beans	2,085	15,46	297	242
Bread	39,742	25,603	3,841	10,298
Butter	21,158	18,179	1,377	1,602
Charcoal (in paper bags)	698	657	14	27
Coal (in paper bags)	9,777	6,166	1,139	2,472
Coal (in transit)	2,475	478	274	1,723
Coke (in paper bags)	579	548	8	23
Confectionery	6,472	5,594	247	631
Dry Commodities	28,809	25,047	1,123	2,639
Dry Goods	96	78	5	13
Flour	8,622	6,053	971	1,598
Fruit and Vegetables	14,806	8,970	2,916	2,920
Grain and Feed	1,055	870	59	126
Hay	94	68	20	6
Ice	935	553	49	333
Kindling Wood (in paper bags)	3,057	3,036	11	10
Lard	1,112	1,037	25	50
Liquid Commodities	4,318	3,960	275	83
Meats and Provisions	13,335	11,648	708	979
Potatoes	5,227	3,264	811	1,152
Wood (cord)	150	92	39	19
Wood (kindling)	268	253	2	13
Miscellaneous	1,124	882	147	95
Totals	165,994	124,582	14,358	27,054

The annual reports also indicate that reweighings and remeasurements were made by local sealers for various municipal departments as follows: — 2,539½ cords of wood, 4,382 loads of coal, 18 tank-loads of fuel oil, 7 tank-loads of gasoline, 183 loads and 68 bales of hay, 18 loads and 321 bags of grain, 11 loads of broken stone, 65 loads of gravel, 1 load cold patch for highway, 1 load of loam, 2 garbage trucks and 188 miscellaneous reweighings and remeasurements.

Local sealers inspected 8,096 clinical thermometers, 2,958 coal weighers' certificates, 1,730 ice scales, 475 junk scales, 2,655 pedlers' scales, 633 transient vendors, 4,905 pedlers' licenses, 37,747 markings of food packages, 20,488 weight statements on bread, 13,140 ice cream cans, 3,593 wholesale milk cans, 13,622 milk jars, 17,266 lubricating-oil bottles, 1,632 paper or fibre cartons, 1,942 markings on paper bags used in the sale of coal, coke, charcoal and kindling wood, and 5,144 other miscellaneous items; and tested 1,885 berry baskets, 2,062 cartons, 647 climax baskets, 5,326 milk jars, 2,161 lubricating-oil bottles, 1,200 standard farm-produce boxes, 167 United States standard barrels, 2,993 retests of gasoline measuring devices after sealing, 32 beer barrels, and made 1,393 other miscellaneous tests.

Prosecutions by Local Sealers

Nature of Offence	Number of complaints	Convicted	Discharged	Pleaded nolo	Filed	Defaulted	Fines imposed	Appealed
Giving insufficient weight of: —								
Apples	1	1	–	–	–	–	$10	–
Bread	3	3	–	–	1	–	35	–
Butter	2	2	–	–	1	–	5	–
Cake meal	1	1	–	–	–	–	10	–
Chicken	4	4	–	–	1	–	60	–
Cranberries	1	1	–	–	–	–	25	–
Fish	1	1	–	–	–	–	25	–
Matzos	3	1	–	2	–	–	60	–
Meat	5	3	1	1	–	–	25	–
Potatoes	2	1	–	1	–	–	65	1[1]
Turkey	3	3	–	–	–	–	20	–
Coal	6	6	–	–	–	–	255	–
Crushed stone	1	–	1	–	–	–	–	–
Giving insufficient measure of: —								
Beer	2	2	–	–	2	–	–	–
Cord wood	3	2	–	1	–	–	40[2]	–
Firewood	1	–	–	–	1[3]	–	–	–
Oil	1	1	–	–	1	–	–	–
Attempting to give insufficient measure of fuel oil	3	3	–	–	–	–	25	–
False weight in determining transportation charge	1	1	–	–	–	–	50	–
Possession of false measure	5	5	–	–	2	–	15	1
Possession of false scales	4	4	–	–	2	–	15	–
Possession of unsealed scales	3	3	–	–	2	–	10	–
Possession of condemned measure	1	1	–	–	–	–	25	–
Larceny in sale of turkey (overcharge)	1	1	–	–	–	–	20	–
Fraud in delivery of coal	1	–	1	–	–	–	–	–
Fraud in delivery of coke	1	1	–	–	–	–	10	–
Failure to weigh coal	3	2	1	–	–	2	–	–
Failure to deliver weight certificate with coal	1	1	–	–	–	1	–	–
Neglect to provide scale on ice vehicle	1	1	–	–	1	–	–	–
Interfering with sealer	2	2	–	–	–	–	25	–
Sale of bread without weight marking	2	2	–	–	–	–	20	–
Peddling without license: —								
Cushions	1	1	–	–	1	–	–	–
Frankfurts	1	1	–	–	–	–	10	–
Fruits and vegetables	5	5	–	–	1	–	40	–
Handkerchiefs	1	1	–	–	–	–	10	–
Ice cream	6	6	–	–	1	–	35	–
Meats and vegetables	1	1	–	–	–	–	25	–
Neckties	1	1	–	–	–	–	15	–
Razor blades	1	1	–	–	–	–	2	–
Shoe polish	1	1	–	–	–	–	50	–
Soap	1	1	–	–	–	–	10	–
Stockings	1	1	–	–	1	–	–	–
Sweaters	1	1	–	–	–	–	20	–
Miscellaneous	17	14	3	–	5	–	115	–
Peddling under expired license	1	1	–	–	1	–	–	–
Possession of another's license	1	1	–	–	1	–	–	–
Furnishing ice cream for unlicensed minors to peddle[4]	10	8	–	1	1	1	60	–
Employing minor to peddle without license	1	1	–	–	–	–	10	–
Permitting minor to peddle without license	2	2	–	–	1	–	20	–
Failure to display license plates on vehicle	1	1	–	–	–	–	15	–
Conducting transient business without license	4	4	–	–	2	–	35	–
Totals	127	112	7	6	32	1	$1,322	2

[1] In Superior Court pleaded nolo and lower court fine of $50 was reduced to $5 and costs.
[2] One fined $5 and ordered to make restitution.
[3] Filed without finding upon making restitution.
[4] One sentenced to 3 months in House of Correction. Two others fined and given suspended sentence of 10 days.

Financial Statement of the Division of Standards

Receipts

1,075 State (hawkers' and pedlers') license fees		$53,750.00
1,867 County (hawkers' and pedlers') license fees		16,662.00
582 City (hawkers' and pedlers') license fees		15,116.00
808 Town (hawkers' and pedlers') license fees		9,401.00
299 Transient Venders' license fees		7,475.00
976 Transfer fees		976.00
Total receipts from license fees		$103,380.00
Fees received for licenses not issued		116.00
Fees received for testing clinical thermometers		167.71
Accumulation of plates and badge money		2,028.51
Interest on deposits		47.84
Total receipts		$105,740.06
Court fines for violations of hawkers' and pedlers' laws		356.00
Accumulated deposits covering uncashed checks		203.00
Total		$106,299.06

Payments

To State Treasurer:		
1,075 State license fees	$53,750.00	
1,867 County license fees	1,867.00	
582 City license fees	582.00	
808 Town license fees	808.00	
299 Transient Vendors' license fees	7,475.00	
976 Transfer fees	976.00	
Fees received for licenses not issued	116.00	
Fees received for testing clinical thermometers	167.71	
Accumulation of plate and badge money	2,028.51	
Interest on deposits	47.84	
Accumulated deposits covering uncashed checks	203.00	
Total payments to State Treasurer		$68,021.06
To County Treasurers	$14,795.00	
To City Treasurers	14,534.00	
To Town Treasurers	8,593.00	
Total paid to county, city and town treasurers		37,922.00
Total payments		$105,943.06
Total paid direct to State Treasurer for Court fines		356.00
		$106,299.06

Summary

Appropriation, personal services	$29,385.00	
Expended	29,385.00	
Appropriation, general expenses	17,068.08	
Expenses	8,715.23	
Unexpended balance		$8,352.85
Total income to the Commonwealth from licenses, etc.		$67,818.06
Total expenditures		38,100.23
Excess of income over expenditures		$29,717.83

REPORT OF THE DIVISION OF THE NECESSARIES OF LIFE

Ralph W. Robart, *Director*

Introduction

Duties of the Division. — The duties of the Division, as prescribed in Chapter 410 of the Acts of 1930, as amended by Chapter 362, Acts of 1933, may be briefly summarized as follows:

a. Investigation of the circumstances affecting the prices of fuel, gasoline and refined petroleum products and other commodities which are necessaries of life.

b. Inquiry into all matters relating to the production, transportation, distribution and sale of said commodities, and into all facts and circumstances relating to the cost of production, wholesale and retail prices and the method pursued in the conduct of the business of any persons, firms or corporations engaged in the production, transportation, or sale of the said commodities, or of any business which relates to or affects the same.

c. Study and investigation of the circumstances affecting the charges for rent of property used for living quarters.

d. Whenever the governor shall determine that an emergency exists in respect to food or fuel, or both, he may, with the approval of the council, by a writing signed by him, designate the director of the Division to act as an emergency food or fuel administrator, or both.

Summary of Activities. — During the past year the Division has followed the same procedure in the performance of its duties as in former years, insofar as this could be done in conformity with national legislation and administrative regulations in the interest of recovery. These recovery measures have resulted in a demand by administrative authorities for basic information required in the determining of administrative procedure to be followed, and the effect which such measures might have on the conduct of business. Because of the multiplicity of questionnaires, the Division has endeavored to limit its inquiries to the lowest possible minimum, and to avoid duplication of such inquiries wherever possible. It is not the province of the Division to enforce a reduction of prices of consumers' goods regardless of the legitimate cost of business, and it has endeavored, in its analyses and investigations, to determine the actual costs of production, transportation, and distribution of commodities in its determination of fair prices, in order that it may not injure any firm or corporation by representing that its business was being conducted at excessive profit, when such was not the case. It has been the policy of the Division to impress upon those doing business in the Commonwealth the thought that the best and surest way to remain in business is to perform a service to the community on a fair and reasonable profit basis.

The Federal administration has definitely announced that consumers must be protected under the NRA and has established in the agricultural administration a consumers council, whose representatives now sit in conference at all code hearings of the NRA and AAA. This council has been of real importance in the protection of the interests of the consumer. When the NRA was established, Massachusetts was the only State in the Union having the facilities afforded by the Division on the Necessaries of Life. It is now the desire of the Consumers' Council to have a similar unit in every State of the country, and particularly in industrial States where there have been attempts to exploit consumers in the past.

The closing of the banks, however vital an economic measure at the time, inevitably resulted in the fact that the great majority of people found themselves with little ready cash to buy the things most necessary for their existence. The Division immediately ascertained how long the food supply then in the Commonwealth would last. The next problem was to see how food could be furnished to homes without cash, and to prevent the hoarding of food supplies by individual households which might be in a position to do so.

The Massachusetts branch of the National Association of Retail Grocers of the United States convened on Monday following the bank closing and passed a resolution assuring consumers that through this Division they would make every effort

to provide food at fair prices and to extend credit, wherever possible, during the period of the bank holiday. The Division was assured by Charles F. Adams, Treasurer of the First National Stores, and by Sydney Rabinovitz, Treasurer of the Economy Stores, that they would immediately direct their managers to extend credit or accept bank checks from any persons whom they could recognize or who could present evidence of their residence in the neighborhood. Daily bulletins were issued by this Division calling upon the people of the Commonwealth to buy only sufficient food to supply them from day to day. Although many grocers were unable to provide credit because of the necessity of cash to replenish their stock, there was most gratifying co-operation, and no one went without food because of lack of ready cash. Prices of foodstuffs were not increased throughout the Commonwealth during this period. Notwithstanding the fact that farmer representatives in the Chicago market could not replenish the supply without actual cash payments to farmers, release of this cash by banks was accomplished in time to avert a crisis.

The Division has been determined, so far as its authority or influence extended, that home owners should be given every reasonable opportunity to retain possession of their homes. Although the President indicated at the outset of his administration that he intended to afford relief through the formation of the Federal Home Owners' Loan Corporation which would give an opportunity for many of our citizens to refinance and retain their property, there seemed to be an epidemic of foreclosures during March, April, May and June. Many of these cases were called to the attention of the Division and during these months it was able to postpone over 1,500 mortgage foreclosures. Although foreclosure is a vicious procedure which wipes out the life-savings of many of our citizens who have invested their savings in the purchase of homes, the fact remains that mortgage loans are necessarily made from the money of depositors in the banks. It became necessary in many instances to protect this deposit money when the equity holder could no longer pay either principal or interest. During the past year there were more foreclosures than in any other year on record; nevertheless the Division received unusual co-operation from banking institutions, and wherever foreclosures could be postponed, at the same time satisfying the banks that the depositors' money was sufficiently protected by such action, such arrangement was made.

The Federal Home Owners' Corporation was established by act of Congress signed by the President in June of this year. This act called for the establishment of state offices for the administration of federal funds. The Division immediately offered its assistance to the President of the United States and carried on, in an advisory capacity, for a period of two months after the act was signed and until such time as the state office was established here. The director of the Division was appointed a member of the Advisory Board of this organization. More concerning the functioning of this Corporation will be found in a later section of this report entitled "Shelter."

National farm relief was accomplished through the setting up of the Agricultural Administration with powers delegated to the Secretary of Agriculture to withdraw certain crops from production and to reimburse the farmer for these withdrawals through payments on a land lease, the financing of which was accomplished by processing taxes on commodities, the production of which was curtailed. The first processing tax was levied on wheat, amounting to 30c a bushel or $1.38 on a barrel of flour. It was announced that the price of bread would advance 2c per pound because of increased costs due to this processing tax. The Division immediately ascertained that the increased cost of flour due to this tax would result in an increase of only four-tenths of a cent per pound in the cost of bread, and, issued, thereupon, a demand that the 2c increase be retracted at once. The interests involved, however, quickly took advantage of the opportunity to secure inordinate profits on the assumption that the general public was gullible and would not know the difference. There was a rush to buy wheat futures, which caused an advance in the price of flour from $3 to $4 per barrel in the course of a week. When the President was informed of this fact, he immediately pegged the price, which largely eliminated speculation in bakery products, and brought the price of flour back to its former level. The prompt action taken in this instance was effective in regulating the price of bread to the consumer.

The Division has carried on an energetic fight to protect farmers and consumers of this Commonwealth against the monopolistic control of the sale of milk, details of which may be found in the section of this report entitled "Milk and Cream."

Although the NRA and other agencies of governmental relief have gone far to provide an increased purchasing power for those already employed in private industry, and for those put to work on public works projects, many citizens found their wages attached on the first pay day, leaving them without sufficient funds to pay current expenses. On an average, 40 persons per day sought the aid of the Division in adjusting problems of this sort. The policy of the Division in this respect is to assist the individual in preparing a budget in accordance with which all outstanding bills are pooled and the creditors are assured that definite weekly payments will be made on these bills; in numerous cases this has been accomplished without the extra expense of attachment fees and the resultant embarrassment suffered by persons who have secured employment. Relief from attachments is but one of the many individual economic problems that the Division has been called upon to adjust. Except in a few instances, it was possible to secure the co-operation of all firms or individuals who were requested to make adjustments which would eventually work out to the mutual benefit of both parties.

The cost of living index for Massachusetts has been prepared monthly and distributed to many agencies throughout the country. The Division assisted the State of New Hampshire, upon request of its Governor, in establishing methods of procuring and compiling this information for the State of New Hampshire. The same weightings by which the elements in the budget are apportioned in Massachusetts are applied in most of the States.

Rent and Housing

In the reports of the Division in former years the housing problem since 1919, and the effect on rentals have been discussed. The culmination of the serious effects of the speculative practices in 1929 and for several years thereafter apparently has been reached. During the past year there were 12,171 foreclosures in Massachusetts, and the loan agencies of the Commonwealth, such as co-operative banks, savings banks, trust companies, and credit unions, have approximately 120 million dollars worth of real estate in their possession. This condition has worked to the disadvantage of those still retaining an actual or a presumptive equity in property for which they have been unable to obtain rentals sufficient to cover the fixed charges and to justify the original loans by the banks. Relief for property owners in such a situation can be accomplished by adjustments on a lower basis of valuation by the banks holding the foreclosed property, but such method of adjustment is neither sound nor fair.

Banks, in many instances, have so operated as to cause a highly competitive condition in the rental of housing accommodations with the result that many additional properties are turned back to the banks, because of the inability of the owners to meet this competition. During the period of speculation, the Division was on the alert in its denouncement of exorbitant rental charges. At the present time the income from rented property is often inadequate to cover fixed charges, and reasonable profit on the investment.

Many owners, under the stress of present conditions, have adopted the policy of giving concessions of one, two and three months' rent free, which has become almost universal, and prospective tenants today, particularly in heated apartments, first ask the question: "How many months' concession do you give," before they inquire as to the monthly rental charges. It will be difficult to correct this practice, but it is necessary, in order that there may be a stabilization of real estate investments, that rental charges be determined on the basis of costs of operation, as is the case of any commodity and the owner of the property has no more justification for granting concessions in the form of free rent for a term than has the grocer to give three additional pounds of butter to a customer who purchases ten pounds.

Eventually the supply of properties for rental and the demand for them will be more nearly equalized and the practice of granting free rental for one or more months will no longer prevail, but this condition will never be corrected until the titular holders of property realize that their equity represents but a small part of the money value of the property and that, in most instances, eighty to ninety per

cent of the value of the property is represented by the mortgage loan thereon. No owner of property is justified in granting free rental for a time or in charging such a low rental as to reduce the return on his property below the fixed income necessary to meet the financial obligations which he has assumed in connection with the property. By so doing, he is jeopardizing the interests of the mortgagor.

Although a cursory survey of vacancies might indicate that no further building will be necessary for some years to come, such is not the case. The surplus of homes for sale or to let, at the present time, is due to the "doubling up" of family groups. When business improves there will be a demand for new dwellings for separate occupancy by families who have been living in crowded conditions. Many marriages have also been postponed during the depression, which has further reduced the demand for vacant houses and apartments. It is conservatively estimated that with the return to normal times, the present vacancies will soon be occupied and a demand created for further housing facilities sufficient to accommodate at least twenty thousand families.

During the next few years, the tendency will probably be toward the construction of single family homes, at a moderate cost of about $5,000 each, and these will for the most part be located in suburban areas, where land is plentiful and where land values are reasonable.

The Federal Emergency Housing Corporation of the Public Works Administration has recently been organized for the purpose of carrying out housing projects which are intended to eliminate slum conditions by providing sufficient low-rental dwellings to compete with the cost of living in slum districts. In Massachusetts there are many areas, particularly in the industrial cities, where a large number of houses might be considered as uninhabitable and beyond the point of profitable rehabilitation, yet the fact remains that unemployment and reduced earning power necessitate present occupation of these buildings because of the low rentals afforded. The restoration of these poorer housing areas cannot be undertaken without capital, either from governmental or private sources. Whether it be through governmental assistance or otherwise, the endeavor will be futile unless it can be accomplished at cost, including the purchase and demolition of buildings and the construction of new buildings, so as to provide rentals not to exceed $7 a month per room. All persons naturally are desirous of improving their standards of living and oftentimes one is actuated more by pride than prudence. In any housing program it is the duty of those directing it to make sure that it does not result in a detriment to the health and welfare of those whom it is proposed to assist.

In England, as far back as 1927, the elimination of slum areas was seriously undertaken but apparently the facilities afforded in the new dwellings were too elaborate because it has been found that the people moving into the new houses were forced to skimp on food in order to have money enough left for the payment of rent. Dr. G. C. M. MacGonigle, Medical Officer for Stockton-on-Tees, in an address before the British Royal Society of Medicine described conditions in his town as follows: "In the fall of 1927, a slum area known as Housewife Lane was evacuated and 152 families living there moved to the improved area, the Mt. Pleasant Estate. A similar area, known as the Riverside, remained in its original form and provided a control. The Mt. Pleasant Estate seemed to offer everything that modern sanitary science could demand, while the Riverside area remained a typical slum district. In spite of the improvement in housing conditions, there was an increase of 8.47 per one thousand deaths for the people who had been housed on the excellent modern estate and a decrease of 2.9 per one thousand for those who had remained in the old slum conditions."

Dr. MacGonigle dealt at some length with the various causes of death in the new area and concluded that the increased rate could not be ascribed to such environmental factors as housing, drainage, over-crowded or unsanitary conditions. There was one striking difference in the Mt. Pleasant Estate; rents were higher and consequently there was less money to spend for food. He said, further, that it has been shown almost beyond any shadow of doubt that this increased death rate is co-related with diminishing expenditure for food consequent on the increase in rents.

The Division recommends and encourages the utilization of capital for the rehabilitation of certain residential districts. These projects can best be accomplished by working in close co-operation with family welfare and other social welfare organizations in the communities in which such construction is contemplated.

These organizations are familiar with the earning power and the amount the prospective tenants in the new area are able to pay for rent. They also possess intimate knowledge of social conditions, all of which information will be valuable to those designated to provide additional housing facilities.

The Federal Home Owners' Loan Corporation

In June, 1933, the President of the United States signed the act creating the Home Owners' Loan Corporation. The creation of this new organization was for the purpose of preventing foreclosure of homes and to assist financial institutions which, in many instances, were forced to foreclose, to protect depositors' money invested in these institutions. The procedure followed in refinancing is to arrange for the exchange of the mortgage for a bond of the Home Owners' Loan Corporation. To bring out more emphatically the fact that this assistance is applicable to individual home owners, the act limited assistance to persons occupying part of the property and only to those homes the value of which is $20,000 or less.

Although this corporation was created by act of Congress and provided a fund of two hundred million dollars, it provided a guarantee of interest payments only to holders of bonds; therefore, it became optional for banks and other financial institutions to accept or reject these bonds in lieu of a mortgage. Because of the type of property on which these loans were made, there is every indication that the great majority of principal and interest payments will be paid by the equity holder until the obligation has matured.

However, there is sometimes the necessity of turning bonds into cash, a procedure which, if followed in the case of Home Owners' Loan bonds, would result in the reduction of their par value and eventually cause a direct loss of depositors' money because of the necessity of accepting the par value of the bonds at the time. President Roosevelt has recognized this condition and has recommended that Congress pass an amendment to the present act which would guarantee the principal as well as the interest on these bonds.

Notwithstanding the slight uncertainty as to the future value of these bonds, banking institutions of this Commonwealth have expressed their confidence in the government by agreeing to accept the Home Owners' Loan Corporation bonds in lieu of mortgages in almost every instance. Over 4,000 new loans have been granted in this Commonwealth, averaging about $4,000 each, and close to 5,000 more have been approved and will no doubt be refinanced within the next few months.

Upon the establishment of branch offices of the corporation in this Commonwealth, many people sought assistance who were not actually in need of such unusual aid, but who saw in it the possibility of refinancing at a saving. This misunderstanding was soon corrected by a statement emanating from this office and that of the Corporation.

There are two ways in which relief may be obtained: — first, the holder of the mortgage may be willing to exchange it for a bond with the Home Owners' Loan Corporation on which the interest is guaranteed by the government and with every possibility within the next few months that the principal will be guaranteed. The second method of relief is by a direct cash loan to take up the mortgage. Cash loans are made only when the mortgage does not exceed 40 per cent of the value of the property and provided the home owner is unable to procure the cash through other channels. The problem of financing homes has become more and more acute each month for the past four years. The private source of mortgage funds continues to dry up, and the stream of money is not flowing into the financing of homes. Fully 25 per cent of the mortgages on homes are in default, and it is the desire of the government to assist the owners to retain the property in which they have invested their savings.

Home owners had no way of knowing, nor did they anticipate, that they would be called upon to make payment in full or in part upon the maturity of their mortages, and therefore, there are large numbers who need assistance. There are also many who purchased at a time when their income was assured and who found that reduced income and unemployment caused them to default in payment on principal, interest and taxes.

The government, practically and by psychological influence, intends through this refinancing assistance to perpetuate the inherent desire of most people to own their

own homes. There is a possibility that with this assistance a new market will be developed for home building and home ownership, as it will create a desire to save and thereby replenish funds in banks that can be loaned for this purpose. Refinancing can be accomplished by applying to the local office of the Federal Home Owners' Loan Corporation where an application form is provided calling for a complete description of the property and pertinent information concerning the applicant. This application is then referred to the appraisal department. The property is visited and a report made as to its present value and the amount that can be loaned thereon. The Corporation will refinance up to 80 per cent of the value of the home; any accrued taxes, assessments, necessary repairs and maintenance will be paid in cash, provided the whole advance does not exceed 80 per cent of the value. The Corporation is not immediately concerned with the holder of the outstanding mortgage but deals directly with home owners irrespective of whether they have borrowed their money from insurance companies, mortgage companies, banks, building and loan associations, or individuals. In order to be able to finance up to 80 per cent of the value of the property, however, it is necessary for the holder of the mortgage to accept the bonds of the Corporation.

Homes lost by foreclosure sale under trust deed or power of attorney or by voluntary surrender by the mortgagee may be recovered within two years from the foreclosure, provided, however, that the present holder will take bonds as would be necessary were he to continue to hold the mortgage.

The policy of appraisal is based on three ratings: (1) the present market value, (2) the reproduction cost less depreciation and (3) the value as arrived at by capitalization of the reasonable rental value of the home during the last ten years. No loans will be made on property containing more than four families. The bonds payable at four per cent interest are tax-free bonds which is a further incentive to exchange mortgages for them. The Division has collaborated with the government in this as in other recovery work in every possible way. Many people in the respective districts have been referred to the local Home Owners' Loan Corporation office, after the benefits of this act were thoroughly explained to them.

Agricultural Administration

The Agricultural Adjustment Act was passed by the 73rd Congress and became a law May 12, 1933. This Act granted specific authority to the Secretary of Agriculture to organize divisions within his department to regulate production of farm commodities for the purpose of increasing the purchasing power of the farmer in proportion to the increased prices of industrial products. In the preamble to the Act it was declared that conditions in the agricultural industry rendered imperative the enactment of such legislation in the interests of the farmer. The preamble reads as follows:

> "That the present acute economic emergency being in part the consequence of a severe and increasing disparity between the prices of agricultural and other commodities, which disparity has largely destroyed the purchasing power of farmers for industrial products, has broken down the orderly exchange of commodities, and has seriously impaired the agricultural assets supporting the national structure, it is hereby declared that these conditions in the basic industry of agriculture have affected transactions in agricultural commodities with a national public interest, have burdened and obstructed the normal currents of commerce in such commodities, and render imperative the immediate enactment of title I of this Act."

Milk and Cream

In Section 8 of the Agricultural Act, the Secretary of Agriculture was authorized to enter into marketing agreements with processors, associations of producers and others engaged in the handling, in interstate or foreign commerce, of any agricultural commodity or product thereof, after due notice and opportunity for hearing to interested parties. Under this section, the Secretary of Agriculture has attempted through marketing agreements to bring about a parity of prices to dairy farmers of the country.

When the Dairy Division was first established a marketing agreement was promulgated by the Secretary of Agriculture which did not prove to be effective in accomplishing the purpose for which it was intended. This agreement covered what is known as the New England Milk Shed, made up of producers in Maine, New Hampshire, Vermont, a small part of New York, and Massachusetts, who serve consumers in the Boston area. Although the Director of this Division protested vigorously against the adoption of the agreement, stating that it would defeat the purpose of the Act and result in profiteering and reduced return to the farmer, this agreement became effective on November 3, 1933. A brief resumé of conditions under this agreement and its effect upon the community follows. The agreement provided for an equalization pool and base ratings which at the outset required Massachusetts farmers to contribute substantially to this pool for the purpose of compensating out-of-State farmers for an uncontrolled surplus. The ratings in Massachusetts were estimated in many instances at a time when tuberculin tests were being conducted by the State and many of the herd eliminated. It provided for surplus payments based on an out-of-State butter price, which, during the period of the agreement, was the lowest for fifty years. It called for fixed prices at wholesale and retail, which, particularly in the case of cream, substantially reduced cream consumption and caused a psychological boycott because of public disapproval of the fixed and excessive prices, which actually resulted in reduced returns to the farmer. So determined were the protests from the farmers and consumers that the Secretary of Agriculture sent a federal board to Boston to hear complaints and evidence, and to consider proposed amendments that might serve to relieve the existing oppressive conditions.

This federal board took back to Washington three thousand typewritten pages of testimony, but before the Secretary of Agriculture could make a complete perusal of this testimony, he became convinced that the conditions here were unsatisfactory and served notice of his intention to terminate the agreement.

At the outset the Dairy Division decided that they would recognize majority groups in any given market, whereupon Consolidated Dairies was incorporated in this market and at least 70 per cent of the farmers serving the market became members and by so doing conferred authority upon the officers of the organization to represent them in the drafting of the agreement. The dealers served by Consolidated Dairies also became a party to the agreement because they served approximately 70 per cent of the consumers. These two groups therefore became the proponents of the agreement. The program of the distributor parties to the agreement was to bring about a fixed scale of prices which would eliminate price differentials then existing between cash-and-carry stores and home delivery groups. The International Milk Dealers Association, with headquarters in Chicago, immediately informed their members throughout the country that they approved of this arrangement and urged all of their members to do everything possible to make it effective.

The milk industry in New England, and Massachusetts particularly, is still in a chaotic condition, although the Secretary of Agriculture has terminated the marketing agreement and has issued a statement of policy coinciding with that of this Division, which, in substance, calls for fixed prices to be paid the producer only. The distribution of milk and cream should be governed by the law of supply and demand and the stabilization elements which restrict resale, either at wholesale or retail, below the cost of production, processing, delivery and any other operating costs entailed in serving the consumer.

This Division is determined that any proposed benefits to the dairy farmers of Massachusetts shall be actual rather than presumptive benefits, which in the past have actually accrued to the benefit of other parties. The return to freedom of purchase, if, when and where the consumer pleases has already resulted in increased consumption and the farmer has materially benefited as a result of this Division's proposals.

Agricultural Relief

For several years past excessive crop production has brought about a most unusual condition. Someone has coined a phrase which aptly fits the situation, — "starvation in the midst of plenty." It is a fact that crops have rotted in the ground and storehouses have been jammed with food while some people in cities have obtained their food from garbage cans. There have been instances where farmers have dumped milk into sewers while children in schools only a few miles away were fainting from hunger at their desks.

It is for the purpose of eliminating conditions such as these that the Agricultural Administration Act was given extraordinary authority to readjust matters. It has undertaken by various methods to dispose of crop surpluses and prevent future over-production. The first and most common method of control attempted by the Secretary of Agriculture was accomplished by estimating future consumptive demand and eliminating certain acreage from production. The act itself distinctly specifies seven commodities which can be so controlled, — wheat, corn, cotton, tobacco, butterfat, hogs and rice. The farmer who reduces his acreage receives compensation from the government commensurate with the amount of land taken out of production. The government obtains this money to pay the farmers by a processing tax which is levied on the commodities referred to and which eventually reaches the consumer in the form of higher prices for these articles.

As further protection for the farmer, assuming that higher prices resulting from these processing taxes would divert consumption to other foods, the law provides that compensatory taxes can be levied against competing products; therefore, production of meats competing with pork can be regulated through taxation and the consumer pays the bill. Thus far processing taxes have been placed on two commodities, cotton and wheat. Ten and one-half million acres of cotton have been withdrawn from productive use, and farmers have been paid one hundred and eleven million dollars as compensation. About eleven million acres of wheat have been taken out of production and the farmers paid proportionately. It may be that such a program will eventually bring about a more intelligent system of production and marketing, as the farmer will be made to realize that over-production causes surplus, and surplus causes low return. Whether it be food or any other commodity, it must be remembered that consumptive demand only absorbs that which can be purchased at prices commensurate with the earning power of consumers.

To further expand the relation between consumers' demand and over-production, let us assume that a family consumes twelve barrels of flour a year. Regardless of how cheap flour may be, this family could not use any more; therefore, providing for them on the basis of fifteen barrels creates a surplus of three barrels and reduces the return to the farmer on his entire output. In fact, he receives less for the fifteen barrels than he would have received for the twelve barrels, if sold at ordinary prices. This surplus multiplied by millions, representing reduced demand by all families in the United States, is enormous, and one can readily understand why farmers who have insisted on planting all of their acreage now find themselves without sufficient income to pay interest on their mortgages and other operating expense of the farm.

The farm relief program is economically sound, and, if carried forward under the intelligent guidance of men conversant with farm conditions, the farmer will be permanently benefited by the control of production. Unfortunately, as is the case in many forms of governmental assistance proposed, highly organized groups representing special interests have established themselves in Washington and have sponsored specific demands contrary to the true principles of stabilization or economic recovery through farm relief, but Secretary Wallace has broad vision, and has nipped most of these attempts in the bud, and the representatives of the special interests have been forced to leave Washington without obtaining special favor.

The foregoing statement with reference to national measures in the interests of the farmer is included in this report because of the effect of such measures on the Massachusetts producers and consumers. It was estimated at the outset that because of the geographical location of Massachusetts, and the necessity of transporting into the State over 90 per cent of the food required, the food bill in Massachusetts alone would be increased by at least two hundred million dollars a year as

a result of farm relief. It is imperative, therefore, that the increased prices resulting from the adoption of the government relief program are actual increases made necessary by the increased cost of all services from the farm to the consumers' homes.

Every factor of service from farm to home has been compelled to add something to the cost of commodities, to offset increased operating costs resulting from the NRA program. All food passes through the expensive stages of packing, loading, freight, refrigeration, hauling, commission, reconditioning and retailing. It is necessary to ascertain whether speculative elements have crept into any phase of this service which would thereby exploit the consumer and result in profiteering. The Division has been alert to observe attempts of this kind, all of which it has hastened to stop. While the estimate that there would be an increase of at least 200 million dollars in the cost of foodstuffs has been found to be correct, no part of this increase, which is quite appreciable, can be said to be excessive or due to manipulation.

Every attempt to fix prices of commodities has been opposed by the Division because it is felt that such procedure is contrary to the principles of national recovery. Consumers in Massachusetts are instinctively shoppers, and consequently are considered thrifty. The effectiveness of the Division has been greatly increased because consumers serve as price investigators, and report, for investigation, prices which appear to be unreasonable. To eliminate the opportunity for the consumer to "shop around" would seriously affect competitive markets.

Psychological price fixing can be brought about by insistence by the government that prices shall be maintained consistent with cost. The sale of commodities below cost is in violation of the true theory of recovery, closes merchandising outlets that have every legitimate right to exist, and, by process of elimination, will eventually set up non-competitive groups which could raise prices at will. The theory of eliminating loss leaders is still new. The President of the United States has said in very understandable language that he will not allow commodities to be sold below cost any more than he will tolerate profiteering.

Ninety percent of the total number of persons gainfully employed in Massachusetts are wage-earners, leaving but ten per cent who are engaged in business for a profit. The wages of this 90 per cent must be sufficient to provide through purchases for the support of the other ten per cent, and unless this ten per cent recognizes the necessity of co-operating in a program of national recovery by selling their commodities at a reasonable profit, they are not entitled to the support of the community.

The soundness of the economic structure of the United States depends upon the ability of the consuming public of one section to use the products which another section produces, whether it be corn, cotton, leather, ore, coal, or any other commodity. No manufacturing industry can continue to prosper unless the products thereof are fully absorbed by the consuming public. Unless the wheels within wheels are kept moving, the whole structure will crumble and producers will be unable to dispose of their products because of the lack of purchasing power on the part of the consumers.

It is apparent that the national government proposes to regulate production of manufactured goods in order to prevent seasonal unemployment through overproduction in certain months, and curtailment during other months of the year. Thus the continuous purchasing power of consumers will be assured through regular employment at wages sufficient to permit of the maintenance of their customary standard of living.

The various phases of recovery affecting the every-day life of our people could be discussed at some length, but it suffices to say in this connection that the Division has endeavored to act in conformity with the national recovery program. Although not always fully satisfied with certain measures in their effect in Massachusetts, the officials of the Division have worked harmoniously with national administrators and, without exception, conditions have been corrected when proven to be wrong.

Petroleum Products

The production and distribution of petroleum and its products is a most important factor in the every day life of the individual, the community and all industry. Street and steam railway lines in all parts of the country have been replaced in whole or in part by bus and truck lines, many of which are operated by the same public utility companies which also operate the railways. In many instances large numbers of trucks are operated by companies whose lines cover the entire country. Many communities would be entirely isolated if bus and truck service were withdrawn.

The industry which supplies the fuel for this great transportation system and for the millions of automobiles used for business or pleasure has been in a somewhat unsatisfactory condition for a number of years, due chiefly to over-production rather than any decrease in consumption. While several States have attempted to restrict the supply through legislation, no satisfactory results have been accomplished and sharp competition resulting from the huge over-supply has caused reported heavy losses by many large companies.

The code for the stabilization of production, transportation, refining and marketing of petroleum and its products by the federal government under the provisions of the National Industrial Recovery Act became effective on September 2, 1933. Restrictions imposed by this new code should greatly benefit the industry, as one of its provisions is that the required production shall be estimated at intervals by a federal agency, and that this required production shall be equitably allotted among the several States and become the operative schedule upon approval by the President.

Other rules and regulations prevent practices which have been a matter of much controversy in the past, including the granting of concessions to retailers in the form of equipment loaned, leased, or otherwise furnished, buildings and repair work, light poles, grease-pits, etc. Failure to observe posted prices through resort to rebates, allowances, concessions, benefits or scrip-books, is also forbidden. Sale by refineries, jobbers, wholesalers and retailers of refined petroleum products at below cost of manufacture is prohibited, and all such products imported into the State where sold shall not be sold below cost, plus reasonable expense in cost of marketing, except to meet competition for such period as may be required to obtain proper governmental action.

While it was felt at the time of the adoption of the code that no price fixing action would be necessary, conditions within the industry were such that Petroleum Administrator Ickes, on October 16th, 1933, ordered the establishment of minimum prices for crude oil and many of its by-products and promulgated a schedule of prices effective December 1st, 1933.

It is apparent that in formulating the oil industry code, an honest effort was made to arrive at a system of producing and marketing petroleum products which would serve the best interests of all concerned but, like all matters of such magnitude, it was impossible to create a code in the first instance which would satisfy all interests and it will undoubtedly require many changes and amendments before it will receive the support and approval of those now opposed to certain sections contained in the document.

During 1933, gasoline prices at retail in Massachusetts remained at a comparatively low level when it is considered that this important product was subject to federal and State taxes totaling 4c per gallon during the first six months and 4½c per gallon for the latter half of the year.

Cash discounts of 2c per gallon below the posted prices of 14c to 18c during the year were prevalent and consumers willing to shop around were able to obtain even larger concessions from the posted price. The Division received only a few complaints relative to gasoline during the year and these were speedily adjusted or explained to the satisfaction of all concerned.

The growing use of range oil burners in Massachusetts has greatly increased the consumption of range oil as a fuel. Prices of this fuel, however, remained at about the same level as in 1932. The oil interests are being afforded an opportunity to further increase the consumption of their fuel oil product, providing they have the foresight to keep the price at a low level and thereby continue it as a competitor of solid fuels.

Trend of Living Costs

The Division is required by law to study and investigate the circumstances affecting the prices of commodities which are necessaries of life, and, in this connection, has continued to compute and publish monthly a cost of living index for Massachusetts. Increased demand for these figures during the past year, both for current and prior months, indicate their value to business and welfare organizations, civic and governmental groups, and the public at large. Requests are received daily from organizations, schools, colleges, libraries and business houses located in other States for information relating to living costs in Massachusetts.

As this index is often used in connection with wage and salary disputes and adjustments, the Division has continually recommended that changed living standards be considered when the index is used for this purpose. The index is based on commodities and services in general use in 1913, and no provision has been made for adjustment of the index in conformity with changes in the standard of living because any changes in the list of items included in the index would tend to destroy its value for purposes of comparison over a long period of time.

The combined cost of living index number increased during 1933 from 121.2 in January to 128.8 in October, and fell to 128.2 in December. The low point of the year (118.5) was in March. Comparable index numbers by months for 1932 and 1933 follows:

Combined Cost of Living Index — 1913 = 100

Month	*1932*	*1933*	*Month*	*1932*	*1933*
January	134.0	121.2	July	128.5	124.3
February	131.6	119.8	August	128.5	125.7
March	130.8	118.5	September	125.2	127.4
April	129.3	118.9	October	124.7	128.8
May	127.5	119.7	November	122.7	128.7
June	125.8	121.0	December	122.8	128.2

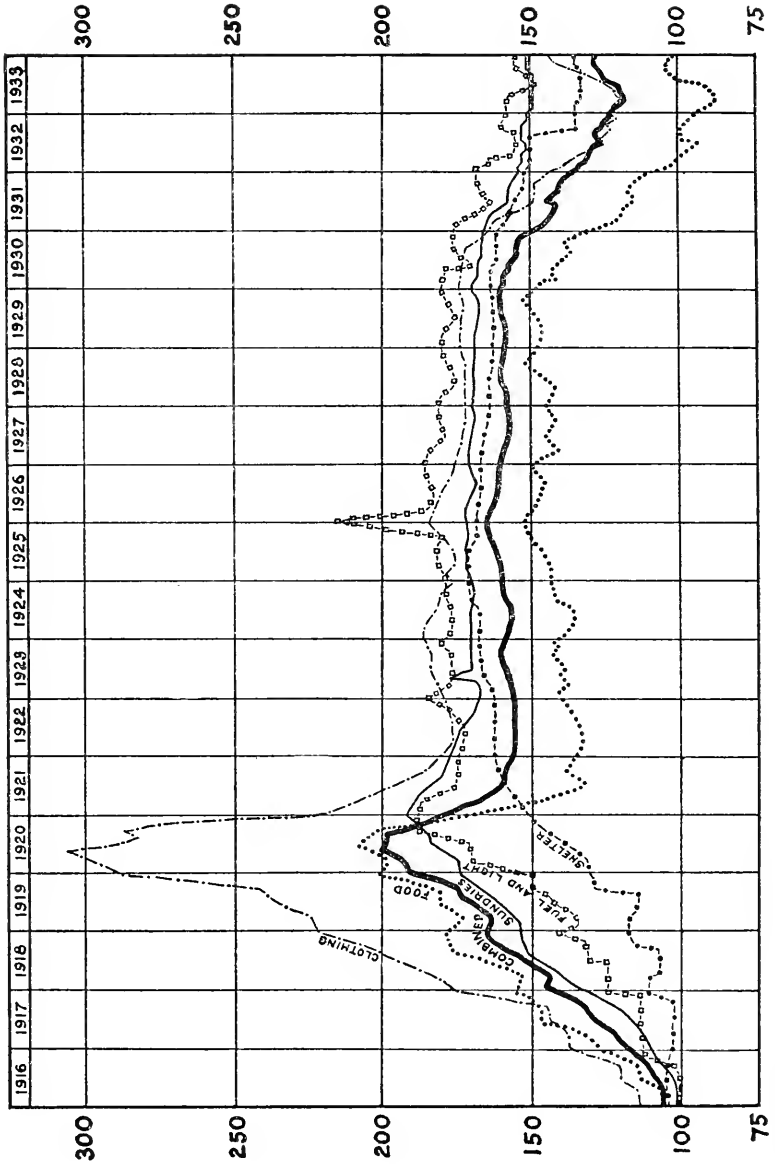
These index numbers expressed in dollars signify that in December, 1933, $128.20 was required to purchase the same quantity of commodities as could be purchased for $121.20 in January, 1933, and for $100 in 1913, the base year.

While the federal measures for recovery adopted during the past year undoubtedly resulted in an increase in the income of many families, the extent to which there has been an increase in the purchasing power of consumers in general has not been definitely determined. Various processing taxes designed to aid the producer, and measures adopted in order to stabilize commodity prices at a higher level have caused increases in prices of many articles and services termed "necessaries of life."

The amount of income determines the purchasing power of consumers and increased prices without a corresponding increase in income naturally result in a decrease in the purchasing power of such income. Many families have gotten deeply in debt during the years of depression, and naturally are endeavoring to reduce their indebtedness before increasing their expenditures. Accordingly, no large increase in the sale of goods can be expected until such time as the income of a great number of consumers shall exceed necessary payments on account of their indebtedness in addition to their current living expenses.

The civil works and public works projects, while not adding any large income for expenditure by those employed, has resulted in restoring their self-respect, and has reduced materially public welfare expenditures and the drain on private charity funds. The large numbers applying for such employment indicate their willingness to perform any kind of work by which they can secure wages. It is very desirable that upon the completion of these projects, other projects financed either by the federal, state or municipal governments be provided in order to furnish employment until such time as those unemployed shall be able to obtain employment in private industry and business. A return to the welfare lists of large numbers of unemployed persons at a time when living costs are at a higher level than when they were employed on public works would be to them a matter of serious concern.

TREND OF COST OF LIVING IN MASSACHUSETTS, 1916–1933:
BY MAJOR ELEMENTS
(BASE — 1913 = 100)



Food. — Food is given a weighting of 37.6 per cent in the total budget as computed by the Division and the index for this item is derived from retail prices of thirty-seven staple food commodities collected monthly from chain and service stores throughout the State.

The food index during the first three months of 1933 continued to decrease as in 1932. Beginning in April, higher monthly prices of most food items caused the index to advance from 86.5 in March to 101.6 in December, or about 17½ per cent during that period.

Food is usually purchased daily in small lots because large numbers of families are either without the necessary money or storage space to enable them to purchase surplus stocks when prices are at a low level. Higher prices are, therefore, immediately reflected in family expenditures for food. A large percentage of the food consumed in Massachusetts has to be transported from other States, but efficient, systematic methods of operation adopted by merchants in this State have largely overcome this handicap, and prices of commodities in many cases are even lower than in States more conveniently located near the source of supply.

The index number for meat products included in the food section decreased in the first four months of the year to 91.5 in April. During the following six months increases were recorded, and in October the index number was 103.3. In November and December, sharp decreases were noted, and the index for December was 96.8 as compared with 94.7 in January, 1933.

According to a report of the Institute of American Meat Packers, meat consumption in the United States increased four pounds per capita, or about one-half billion pounds during 1933, and in that year production was about one billion pounds greater than in 1932.

Heavy production during the later months, coupled with relatively low purchasing power of the consumer, caused an increase in stocks and forced prices to a materially lower level during the last two months of the year. Data relative to production and consumption of meat under federal inspection during the years 1932 and 1933 in the United States follow:

Kind of Meat	Production		Consumption	
	1932	*1933*	*1932*	*1933*
Beef	3,940,000,000	4,501,000,000	4,417,000,000	5,005,000,000
Veal	454,000,000	501,000,000		
Lamb and mutton	682,000,000	673,000,000	681,000,000	672,000,000
Pork	5,696,000,000	5,969,000,000	5,658,000,000	5,716,000,000
Lard	1,573,000,000	1,689,000,000	1,031,000,000	1,018,000,000
Total	12,345,000,000	13,333,000,000	11,787,000,000	12,411,000,000

The milk problem in Massachusetts, which has been a matter of much controversy throughout the year, has been discussed in an earlier section of this report.

In accordance with the plans of the Federal Recovery Administration, which plans include the purchase of surplus products for the express purpose of increasing commodity prices, and their distribution to needy families, the Federal Surplus Relief Corporation was formed with Hon. Harry Hopkins of the Federal Relief Administration as President, Hon. Henry A. Wallace, Secretary of Agriculture, as Vice-president, and Hon. Harold L. Ickes, Secretary of Interior, as Treasurer.

Commodities purchased by this Corporation with government funds are being distributed through local welfare boards and are available to persons receiving welfare aid, and to other needy families. Flour and salt pork have already been distributed in large quantities in Massachusetts, and commodities which, it is stated, will be included in future distributions are smoked pork, beef, butter, cheese, lard, oranges and other products which are classed as surplus stocks. Distribution of coal and other items not classed as surplus will also be included as part of the relief program.

The proper administration of this distribution should prove of great benefit to needy families because, according to the announcement, these supplies are to be considered as supplementary relief and should not in any way effect a reduction in amount of aid given through public welfare organizations.

Clothing. — Clothing expenditures represent 12.8 per cent in the budget as computed by the Division, and are apportioned about equally between the men's and women's clothing groups.

The index for combined clothing is largely based on a cost of staple goods entering into the manufacture of wearing apparel, because the finished product is a difficult item to standardize. Variations in styles and types of merchandise, and costs of tailoring which affect the quality and price of the finished garment result in a wide range of prices for items made from the same or similar fabrics.

Many articles of clothing now in demand were not in general use in 1913, the base year of the budget and are, therefore, not included in the clothing index. The Division does collect prices of many of these items, but merely for the purpose of making a comparison with the price trends of the usual budget items with which there is usually a close correspondence.

During 1933 the clothing index increased from 121.2 in January to 143.4 in December, and the low point of the year was 119.1 in March. Higher prices of all clothing items were noted during this period.

Fuel and Light. — The fuel and light items of the budget are given a weighting of 5 per cent in the total and the prices of anthracite coal, gas, electricity and kerosene, are included with respective weights of 61, 20, 15 and 4. The prices of anthracite coal are collected monthly from representative coal dealers, prices of gas and electricity are furnished by the Department of Public Utilities, and the prices of kerosene are reported on the regular grocery questionnaire.

During the first six months of 1933, the index for this group dropped from 157.1 in January to 148.8 in June, due to lower prices of coal and kerosene. During the last half of the year a gradual increase to 156.8 in December was noted. Prices of gas and electricity, which are products of utility companies under State control, remained at about the same level during the entire year.

The Massachusetts fuel bill is still a matter of much concern to the consumer. While the price of anthracite is at a somewhat lower level, it is still 78 per cent above the price in 1913, and has not been reduced in the same proportion as other commodities which are considered necessaries of life. This is due chiefly to circumstances beyond the control of local dealers. The mining of domestic anthracite is done at a relatively high labor cost because of excessive unionization in the industry. Foreign products offer practically the only competition and the prices of such fuels are largely based on the price charged for domestic products.

During the first eight months of the 1933–1934 coal year, domestic anthracite deliveries in Massachusetts dropped approximately 250,000 tons, and the amount of 1,561,000 tons was over a million tons less than the amount for the corresponding period in 1930–1931. While continued increase in the use of coke, oil and other substitutes accounts in part for the decreased anthracite demand, at least part of the lost market must be attributed to lack of sufficient funds in the hands of the consumer to purchase this high priced fuel.

The widespread use of range oil burners, which can be purchased on small payment contracts and which enable the consumer to control the use of fuel and purchase his supply in small quantities, undoubtedly, has been the cause of the large decrease in consumption of solid fuel.

Coke prices are largely based on the prevailing prices of anthracite rather than on the actual cost of production, but notwithstanding this fact, increased delivery figures for this fuel indicate that many consumers have turned from anthracite to the use of coke as a household fuel.

The result of a yearly survey to determine the relative importance of various fuels used in heating homes is given below:

	Coal Years	
Anthracite:	*1931–1932*	*1932–1933*
Domestic sizes	3,566,000 net tons	2,969,000 net tons
Buckwheat sizes	150,000 " "	150,000 " "
Bituminous Coal	600,000 " "	700,000 " "
Coke	980,000 " "	1,060,000 " "
Briquets	125,000 " "	105,000 " "
Oil	184,000,000 gallons	300,000,000 gallons
Gas Installations	5,100	4,927

The Federal Surplus Relief Corporation has announced that anthracite coal deliveries will become a part of the relief program, and it is estimated that more than

150,000 tons of anthracite will be delivered in Massachusetts through this agency. Under the policy adopted, local dealers will make deliveries upon approval by the local welfare boards, and, in cases in which the recipient is receiving aid from such boards, the delivery charge to local dealers, which has been set at $2.50 per ton by the government agency, will be paid by the welfare board. To persons not receiving public welfare aid coal will be delivered upon proof of its need, but the delivery charge must be paid either by the receiver of the coal or by some charity organization. This policy should prove advantageous both to the local welfare boards and to consumers. In the first instance, a large saving will result, and in the second a larger amount of fuel is made possible. The purchase of this fuel plus transportation to the dealers' yards will be paid from government funds.

The Division has continued to compile and issue detailed information relative to the fuel situation in New England and tables containing much comparable data for a series of years appear in Appendix II of this report. Other valuable information in the files of the Division is available for the use of business organizations and individuals upon request.

During the year, Representative Dwight S. Waring of Fall River requested the Division to investigate the prices being charged for anthracite coal in that city. It was found that lower transportation rates by tidewater might be taken advantage of and the saving passed on to the consumer, as has been done in the city of New Bedford.

According to press reports the findings of the Division were interpreted as a statement to the effect that dealers in Fall River were overcharging. This resulted in a temporary boycott of the local dealers. The Director of the Division visited the city and conferred with the dealers, and he assured them that it was the desire of the Division to lower the prices of fuel wherever possible, that no accusation was made to the effect that the dealers' profits were excessive, but that the fact still remained that the prices charged for anthracite were too high, due to fixed mine prices and fixed transportation charges over which local dealers had no control.

The investigation in Fall River brought to light a very interesting condition which exists in all mill cities, namely, that the added cost of fuel purchased by people whose earnings are moderate, is due to the extraordinary demand for Lehigh Valley coal, a free-burning fuel which generally retails for $1.00 or more than regular anthracite. It was found that people who work long hours, and, in most cases, leave home very early in the morning, preferred this coal because the furnace could be refueled without opening it up and without having to wait until the fire had sufficiently rekindled to be shut off for the day.

The Division assumed that any saving in transportation would be passed on to the consumer. During the year the Interstate Commerce Commission reduced rail transportation rates 65c per ton to Boston. Instead of this freight reduction being passed on to the consumer, 40c additional per ton was added to dealers' costs, a result, it is contended, of compliance with labor provisions of the NRA. The matter of securing lower prices for anthracite coal would seem to be within the control of the dealers affected, because reports show very definitely that consumers have turned to the use of other fuels. The consumption of anthracite is decreasing every year.

Sundries. — The sundries section of the budget includes a miscellaneous assortment of goods and services necessary for the operation of the home and not specified in other major budget sections.

Expenditures in this section represent 22.8 per cent of the total budget and the items, many of which are not standardized, cover a wide variety of consumers' needs and desires. These include carfare; medical care, drugs, toilet articles, etc.; furniture and household supplies; recreation, theatres, etc.; reading material, stationery and telephone calls; organization dues and insurance; contributions to church and charity; tobacco; candy, soft drinks, etc.; and ice.

The amount of income available for miscellaneous expenditures is commonly regarded as a measure of the standard of living. At times when incomes are large, conditions under which families live are improved but when incomes are abnormally low, the amount required for food, clothing, shelter and fuel leaves little available money for sundries, such as home conveniences, advancement, entertainment, and other items which should be regarded as necessary, even when the standards of living are at the minimum.

During the past year, problems of many families, who mortgaged future income in order to buy luxuries and semi-luxuries during a period of easy credit and who now find their income greatly reduced or entirely lost, were given personal attention by the Division. The willingness of most dealers and creditors to accept suggested compromise agreements for payment of bills or to delay drastic action in cases where it was not possible to meet any part of the obligation under existing conditions, greatly assisted the Division in the handling of these cases and prevented much undue suffering and the breaking up of homes of many families.

The only allowance made in the budget for savings is a limited amount for the item of insurance. Many families have found it not only impossible to continue payment for this protection during the past year, but have found it necessary to request the cash surrender value of policies, in some instances covering the entire family, in order to meet other obligations and preserve adequate living conditions in the home. Other thrifty families who were able to put aside a part of their income as savings at a time when the income exceeded the customary living expenses have been forced to withdraw these savings in order to provide for their immediate requirements.

In 1933 the sundries index increased from 148.8 in January to 151.1 in December, chiefly due to higher prices of ice, house-furnishings and tobacco.

Shelter. — The cost of shelter, which represents 21.8 per cent of the budget, was slightly lower during the greater part of the year but demands for higher rentals for unoccupied property during the last few months were reflected in an increase in the index from 133.0 to 135.0 or to the same level as in the latter part of 1932.

A serious problem has arisen due to the inability of a great many tenants to meet charges for rental from the small amount of income available. Climatic conditions make clothing and fuel important necessaries in Massachusetts. In many cases the entire income of a family has necessarily been expended for food, clothing and fuel, leaving nothing for rental. Owners of rented property for which they were not able to obtain payments for rent resorted to eviciton of non-paying tenants. Some landlords hesitated to take such action, and allowed the tenants to occupy the property for a few months in the hope that they would eventually obtain employment. Such procedure has often resulted in loss of the property by the equity holder, either through mortgage foreclosure or sale for taxes.

In cases where action has been taken and tenants evicted, many were without funds to pay either moving expenses or the necessary rental deposit to obtain new quarters, and welfare agencies found it necessary to find other homes for these families. In some communities a small allowance is provided out of public welfare funds for the payment of rent, but in many other instances no rent money is allowed for more than the first month, or a part of the first month, in which cases, the tenant unable to pay the rental is simply passed from one property to another where he can obtain shelter until such time as the new landlord can take action to evict him. The Division has attempted to assist both landlords and tenants in thousands of cases which have been brought to its attention during the year. These cases have been taken up directly with welfare organizaitons, city officials, and others, and landlords who lacked the necessary means to bring action for eviction of non-paying tenants have been referred to officials and agencies able to render aid in such cases.

Many family groups are now "doubled up" under one roof in order to reduce the per family expenditure for shelter, and many vacancies still exist in all types of residential property. These will be filled only when the incomes of families become sufficient to permit them to establish individual homes.

APPENDIX I

Table 1. — Cost of Living Index Numbers by Elements, 1919–1933 [1]

1919

Elements	January	February	March	April	May	June	July	August	September	October	November	December
Food	180.1	174.2	174.1	176.6	179.7	181.0	812.2	187.4	182.0	184.7	188.9	189.1
Clothing	221.5	223.5	223.8	235.3	235.8	235.8	235.8	237.2	240.9	256.3	271.6	272.3
Shelter	118.4	118.4	118.4	115.5	115.5	115.5	115.5	115.5	115.5	129.6	129.6	129.6
Fuel and Light	143.1	135.1	135.1	135.7	140.0	144.3	145.8	150.1	150.1	150.7	152.9	153.5
Sundries	155.0	155.0	155.0	156.0	158.0	160.0	163.0	165.0	167.0	172.0	175.0	175.0
Combined	167.5	164.7	164.7	167.0	169.1	170.3	171.5	174.6	173.1	179.9	184.5	184.7

1920

Elements	January	February	March	April	May	June	July	August	September	October	November	December
Food	200.9	195.5	198.9	198.2	207.9	207.9	216.9	205.1	202.5	194.7	187.2	179.6
Clothing	286.2	291.3	299.8	305.5	302.0	288.4	280.9	282.9	285.9	268.9	258.3	226.0
Shelter	131.0	131.0	131.0	133.8	134.9	139.4	139.4	142.4	147.8	147.8	150.6	151.7
Fuel and Light	154.2	160.7	161.6	170.8	171.1	171.7	172.1	175.0	188.5	189.2	190.0	189.9
Sundries	175.9	175.9	175.9	183.0	183.0	185.0	185.0	185.0	188.0	190.0	192.0	192.0
Combined	192.0	190.8	193.4	196.3	200.3	199.7	202.6	198.5	200.1	194.9	191.3	183.9

1921

Elements	January	February	March	April	May	June	July	August	September	October	November	December
Food	171.5	158.6	145.1	142.1	135.3	133.5	139.5	142.0	139.9	138.7	137.2	139.4
Clothing	219.9	214.4	208.2	206.5	201.6	197.1	191.8	187.1	186.7	186.2	187.6	186.1
Shelter	151.7	151.7	153.2	156.3	159.4	159.4	159.4	159.4	161.0	161.0	161.0	161.0
Fuel and Light	188.8	188.3	187.5	177.4	176.8	176.1	175.9	175.9	175.4	180.9	180.0	180.5
Sundries	192.0	190.0	190.0	188.0	188.0	185.0	183.0	183.0	180.0	180.0	180.0	178.0
Combined	179.5	172.9	166.4	164.5	161.4	159.4	160.8	161.4	160.0	159.7	159.2	159.6

[1] Cost of living index numbers for the years 1910 to 1918 were compiled by the former Commission on the Necessaries of Life, and were published in its annual reports. The index numbers here given are in continuation of the series, and the same procedure was followed in their collection and compilation.

Table 1. — Cost of Living Index Numbers by Elements — Continued

1922

Elements	January	February	March	April	May	June	July	August	September	October	November	December
Food	136.1	135.6	133.1	135.4	134.0	134.1	137.2	136.3	136.3	138.2	139.9	139.8
Clothing	180.1	179.2	176.9	176.5	176.1	176.5	176.1	174.9	177.6	178.4	179.1	179.4
Shelter	162.5	162.5	162.5	162.5	162.5	162.5	162.0	162.0	162.0	162.0	162.5	162.5
Fuel and Light	174.9	174.9	173.7	172.8	172.8	172.7	172.0	172.9	177.0	182.6	184.5	184.8
Sundries	178.0	177.0	177.0	174.0	174.0	174.0	174.0	172.0	169.7	169.7	169.7	168.8
Combined	157.3	156.8	155.3	155.6	154.9	155.0	156.2	155.3	155.4	156.6	157.7	157.5

1923

Food	139.3	141.3	138.8	139.3	141.0	140.0	143.4	142.0	143.5	144.9	142.0	144.1
Clothing	178.0	182.2	182.8	184.0	183.2	184.1	182.1	182.2	183.4	185.9	187.0	186.1
Shelter	162.5	162.5	164.5	166.0	166.5	167.0	167.0	167.0	167.0	167.5	167.5	167.5
Fuel and Light	184.8	184.2	178.2	178.6	177.5	177.4	178.2	177.0	177.7	181.6	182.1	181.7
Sundries	168.8	168.8	168.8	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
Combined	157.1	158.5	157.5	158.5	159.1	158.9	160.1	159.5	160.3	161.6	160.5	161.3

1924

Food	141.0	139.9	139.0	136.1	136.4	137.1	137.5	138.5	142.4	142.1	141.5	143.0
Clothing	186.8	187.4	186.0	184.9	183.3	181.6	181.4	178.8	180.6	180.1	178.4	181.2
Shelter	168.0	168.0	168.0	168.0	168.0	168.0	168.0	172.0	172.0	172.0	172.0	172.0
Fuel and Light	178.4	178.6	178.8	177.1	177.0	177.2	177.5	177.4	179.6	179.3	179.5	179.5
Sundries	171.4	171.4	171.4	171.4	171.4	171.4	171.4	170.5	170.5	170.5	170.5	172.2
Combined	160.1	159.7	159.2	157.7	157.6	157.7	157.8	158.4	160.5	160.3	159.8	161.2

1925

Food	144.7	142.8	144.4	143.4	143.7	146.8	147.9	150.3	150.3	153.1	154.1	155.6
Clothing	177.9	177.6	181.6	181.2	180.8	182.3	182.1	180.7	181.1	181.5	182.1	186.6
Shelter	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	170.0	170.0	170.0	170.0
Fuel and Light	179.9	180.0	175.6	175.7	175.7	176.6	178.5	181.2	181.2	181.2	186.4	197.4
Sundries	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	171.4	171.4	171.4	172.2
Combined	161.5	160.6	161.6	161.1	161.2	162.8	163.4	164.4	163.9	165.1	165.9	168.0

1926

Food	151.8	153.9	149.2	151.9	148.0	148.3	147.7	145.4	146.8	147.3	147.4	147.9
Clothing	184.5	181.7	182.3	179.2	180.3	181.2	178.6	178.7	177.0	177.7	177.5	177.5
Shelter	170.0	170.0	170.0	170.0	168.0	168.0	168.0	168.0	168.0	168.0	168.0	168.0
Fuel and Light	214.6	198.0	183.3	181.4	181.9	182.0	183.3	184.4	184.4	185.2	185.7	185.5
Sundries	172.2	172.2	172.2	172.2	170.5	170.5	169.7	169.7	169.7	170.5	171.4	171.4
Combined	167.0	166.6	163.9	164.5	162.3	162.5	161.9	160.9	161.3	161.8	162.1	162.3

1927

Food	145.9	143.7	142.1	143.4	145.7	145.5	142.8	142.2	142.6	142.1	144.6	145.0
Clothing	176.1	176.3	175.1	175.0	173.9	173.3	170.2	171.6	172.5	172.1	172.8	172.8
Shelter	168.0	168.0	166.0	166.0	166.0	166.0	166.0	165.0	165.0	165.0	165.0	165.0
Fuel and Light	185.4	185.3	184.6	181.6	178.5	178.4	179.0	179.3	181.5	181.5	181.5	181.4
Sundries	171.4	171.4	171.4	170.5	170.5	170.5	170.5	170.5	169.7	169.7	170.5	170.5
Combined	161.2	160.3	159.0	159.2	159.9	159.7	158.6	158.0	158.2	158.0	159.3	159.5

1928

Food	145.4	144.2	142.2	144.6	146.1	144.6	148.6	149.3	152.7	150.0	149.0	147.6
Clothing	172.6	172.7	172.6	171.7	173.8	172.1	172.5	170.9	171.5	169.3	171.5	172.8
Shelter	165.0	165.0	165.0	165.0	165.0	165.0	165.0	163.0	163.0	163.0	163.0	163.0
Fuel and Light	181.4	181.4	181.2	175.4	175.4	175.4	175.4	175.5	177.9	177.9	179.7	179.6
Sundries	170.5	169.7	169.7	168.8	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0
Combined	159.6	158.9	158.0	158.4	159.6	158.7	160.5	160.3	161.9	160.5	160.5	160.0

1929

Food	148.5	146.5	147.6	147.7	149.1	148.1	151.8	154.7	153.0	152.1	149.3	148.9
Clothing	173.3	170.1	174.1	173.6	173.6	173.6	172.2	173.6	173.2	173.5	173.6	174.0
Shelter	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0
Fuel and Light	179.5	179.6	179.7	177.9	174.2	174.2	176.4	176.3	178.9	179.0	179.1	179.3
Sundries	170.0	169.2	169.2	168.9	168.9	167.9	167.7	167.7	167.7	168.4	169.2	169.2
Combined	160.5	159.0	160.0	159.8	160.2	159.6	161.1	162.5	161.9	161.7	160.7	160.6

Table 1. — Cost of Living Index Numbers by Elements — Concluded

1930

Elements	January	February	March	April	May	June	July	August	September	October	November	December
Food	146.4	145.8	141.9	142.1	141.7	139.3	137.6	136.6	137.2	137.0	132.9	130.8
Clothing	173.6	173.6	173.5	173.3	173.1	173.0	172.4	172.7	171.6	168.8	165.5	164.0
Shelter	163.0	163.0	163.0	163.0	163.0	161.0	161.0	161.0	161.0	161.0	161.0	160.5
Fuel and Light	179.4	179.4	178.3	178.1	170.7	170.7	172.1	174.3	175.0	175.8	175.4	175.5
Sundries	169.2	168.1	167.2	167.2	167.0	166.9	166.5	165.7	165.7	165.3	165.6	165.0
Combined	159.4	158.9	157.0	157.1	156.4	155.0	154.2	153.7	153.9	153.4	151.2	149.9

1931

Food	128.5	121.3	120.9	118.9	115.9	115.0	115.7	117.0	117.4	115.1	111.6	107.8
Clothing	162.4	157.5	156.6	154.5	151.0	149.2	149.1	148.6	148.4	148.0	145.8	145.0
Shelter	160.5	156.0	156.0	156.0	155.0	155.0	155.0	153.0	153.0	151.0	151.0	151.0
Fuel and Light	175.5	175.4	175.8	166.0	163.1	163.1	164.9	165.5	167.5	168.3	168.7	168.1
Sundries	164.2	163.8	162.2	161.3	158.8	157.5	157.5	157.0	157.0	156.6	156.0	154.6
Combined	148.6	143.9	143.3	141.5	141.1	140.2	145.0	140.4	140.7	139.3	137.5	135.7

1932

Food	105.6	102.2	100.3	98.6	96.2	93.0	98.8	99.3	99.2	97.4	95.8	94.9
Clothing	138.8	135.9	135.2	132.2	128.8	124.7	125.4	123.9	122.0	123.9	120.4	121.7
Shelter	151.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	135.0	135.0	135.0	135.0
Fuel and Light	168.0	164.0	164.0	155.8	154.2	153.5	154.9	154.9	158.9	159.9	157.3	156.8
Sundries	154.6	152.9	152.9	152.9	151.2	151.2	152.9	152.9	152.9	152.9	150.1	150.1
Combined	134.0	131.6	130.8	129.3	127.5	125.8	128.5	128.5	125.2	124.7	122.7	122.8

1933

Food	91.6	87.9	86.5	86.9	89.7	92.1	100.0	102.1	103.8	104.2	103.2	101.6
Clothing	121.2	121.5	119.1	120.7	121.7	124.6	126.6	130.8	135.7	140.4	142.6	143.4
Shelter	135.0	135.0	133.0	133.0	133.0	133.0	133.0	133.0	133.0	135.0	135.0	135.0
Fuel and Light	157.1	157.0	156.9	156.2	150.4	148.8	150.1	151.1	154.6	155.3	155.4	155.1
Sundries	148.8	148.8	148.8	148.8	148.8	149.0	149.0	149.4	150.4	151.1	151.1	151.1
Combined	121.2	119.8	118.5	118.9	119.7	121.0	124.3	125.7	127.4	128.8	128.7	128.2

APPENDIX II

Fuel Statistics

Table 2. — Anthracite Coal — Total Production, New England Receipts, Imports

(Net Tons)

Years (ending June 30)	United States Production	New England Receipts	New England Imports
1925	63,839,000	8,280,000	224,023
1926	85,454,000	10,612,000	387,458
1927	80,647,000	9,146,000	106,157
1928	76,746,000	9,376,000	369,036
1929	76,888,000	9,040,000	483,979
1930	69,732,000	8,390,000	657,987
1931	59,667,000	7,062,000	610,648
1932	49,855,000	5,639,000	567,397
1933	49,399,000	5,252,000	226,598*

*Imports for January 1 to June 30.

Table 3. — Bituminous Coal — Total Production, New England Receipts, Imports

(Net Tons)

Years (ending June 30)	United States Production	New England Receipts	New England Imports
1925	520,053,000	21,313,000	35,813
1926	578,290,000	21,087,000	62,364
1927	520,684,000	22,426,000	53,096
1928	493,252,000	19,652,000	76,889
1929	526,361,000	21,311,000	50,114
1930	461,879,000	19,901,000	32,385
1931	378,241,000	17,976,000	66,728
1932	309,710,000	15,022,000	53,589
1933	327,940,000	15,984,000	32,431*

*Imports for January 1 to June 30.

Table 4. — New England All-Rail Movement of Coal as shown by Number of Cars of Coal passing East through the Gateways

(Daily Average)

Years	Anthracite				Commercial Bituminous			
	Boston & Maine	Boston & Albany	New York, New Haven & Hartford	Total	Boston & Maine	Boston & Albany	New York, New Haven & Hartford	Total
1925	126	46	167	339	77	61	135	273
1926	168	57	234	459	78	68	148	294
1927	140	50	210	400	74	62	135	271
1928	137	47	245	429	68	49	108	225
1929	134	43	222	399	74	60	121	255
1930	101	47	202	350	62	51	110	223
1931	75	32	177	284	49	40	102	191
1932	77	23	142	242	47	32	84	163
1933	68	21	133	222	51	34	85	170

Table 5. — Deliveries of Domestic-sized Anthracite for Last Eight Coal Years — The Commonwealth of Massachusetts

(Coal Year, April 1 to March 31)

	Net Tons
1925–1926	4,243,872
1926–1927	5,087,360
1927–1928	4,744,324
1928–1929	4,912,810
1929–1930	4,703,019
1930–1931	4,177,238
1931–1932	3,565,768
1932–1933	2,968,429
1933–1934 (8 months)	1,561,170

Population of Massachusetts, 1930 (United States Census), 4,249,614.

Table 6. — Freight Tariffs per Gross Ton and Average Retail Price per Net Ton Delivered on Domestic-sized Anthracite for Certain Representative Municipalities of Massachusetts

City or Town	Delaware & Hudson and Philadelphia & Reading Freight Tariffs	Average Retail Prices December 1, 1933	
		Stove	Pea
Adams	$3.50	$14.00	$12.00
Brockton	4.00	14.25	12.25
Fall River	3.55	14.50	11.50
Fitchburg	4.00	14.50	12.50
Framingham	4.00	14.35	12.25
Gloucester	4.00	14.00	11.75
Greenfield	3.88	14.00	11.75
Haverhill	4.00	13.75	11.00
Holyoke	3.88	14.00	11.50
Lawrence	4.00	15.25	12.75
Leominster	4.00	14.50	12.50
Lowell	4.00	14.75	12.75
Lynn	3.65	14.25	12.00
New Bedford	3.55	13.00	10.75
Newburyport	3.75	13.50	11.00
North Adams	3.50	14.00	12.00
Northampton	3.88	14.00	11.75
Norwood	4.00	14.25	12.15
Peabody	3.65	13.75	11.50
Pittsfield	3.50	14.00	11.25
Salem	3.65	13.75	11.50
Springfield	3.75–3.88	14.25	11.60
Taunton	3.75	14.75	11.50
Westfield	3.75	14.25	11.50
Woburn	3.80	14.00	11.75
Worcester	4.00	14.50	12.15
Boston	3.65–3.80	14.10	12.00
Suburbs	3.65–3.80	14.10	12.00

Freight tariffs from mines to tidewater:
To Port Richmond (Philadelphia) for transshipment to Boston, $2.09. Barge rate, about $1.00.
To Hoboken, N. J. (New York City Harbor) for transshipment to Boston, $2.34. Barge rate, about 75c.

Table 7. — Population, Number of Dealers and their Deliveries of Domestic-sized Anthracite for Certain Representative Municipalities of Massachusetts

City or Town	Population (1930)	Number of Dealers	Deliveries (Net Tons)		
			1932–1933 (Coal Year)	1933–1934 (8 months of Coal Year)	†1933–1934 (8 months of Coal Year) Foreign Anthracite
Boston District*	1,619,616	118	1,228,564	633,419	117,951
Adams	12,697	5	10,743	6,224	0
Brockton	63,797	12	25,784	12,272	2,324
Fall River	115,274	9	49,369	33,418	4,866
Fitchburg	40,692	8	19,940	10,469	652
Gloucester	24,204	5	26,812	13,066	1,431
Greenfield	15,500	5	16,623	8,478	145
Haverhill	48,710	13	44,698	19,784	3,708
Holyoke	56,537	6	41,358	23,522	0
Lawrence	85,068	28	51,066	31,261	8,346
Leominster	21,810	7	15,306	9,126	757
Lowell	100,234	22	48,705	25,246	4,405
Lynn	102,320	9	70,174	27,907	10,330
New Bedford	112,597	9	94,034	57,065	145
Newburyport	15,084	5	31,240	15,168	475
North Adams	21,621	10	17,958	10,163	0
Northampton	24,381	7	32,392	17,996	0
Norwood	15 049	4	14,872	6,825	1,971
Peabody	21,345	7	12,281	4,625	619
Pittsfield	49,677	11	57,463	33,966	0
Salem	43,353	15	46,613	28,294	2,330
Springfield	149,900	17	110,603	60,425	1,066
Taunton	37,355	5	24,866	14,631	676
Westfield	19,775	5	12,923	7,166	102
Woburn	19,434	7	12,315	4,344	509
Worcester	195,311	21	139,314	63,478	1,756
City of Boston	781,188	47	829,550	430,306	83,787
Cambridge	113,643	8	60,317	26,828	661
Chelsea	45,816	6	20,742	9,178	1,803
Everett	48,424	4	27,277	10,913	3,674
Malden	58,036	7	20,160	10,959	987
Medford	59,714	5	13,082	6,882	312
Newton	65,276	5	38,215	23,655	3,219
Quincy	71,983	5	27,477	8,989	801
Somerville	103,908	12	70,202	38,627	12,680
Watertown	34,913	4	19,930	10,559	1,099

*All of above included in Boston District figures together with Arlington, Belmont, Brookline, Melrose,

REPORT OF THE MASSACHUSETTS INDUSTRIAL AND DEVELOPMENT COMMISSION

JOHN T. SCULLY, *Executive Secretary*

The third and final report of the Massachusetts Industrial and Development Commission for the period from December 1, 1932, to May 31, 1933, is herewith submitted.

On December 23, 1932, John T. Scully was confirmed for the position of executive secretary, filling the vacancy caused by the resignation of Leon M. Lamb on May 14, 1932. The assistant secretary, M. Joseph McCartin, temporarily assumed the duties of secretary until the appointment of an executive secretary was made. On January 31, 1933, Mr. McCartin resigned his position in order to become the director of state public employment offices.

From the appointment of the new secretary about the end of December, until hearings were held before the committees considering the bill to abolish the commission, much time and effort was consumed outside of the usual routine of office duties in collecting data and distributing information as to the past activities of the commission.

To say the least, the uncertainty as to the tenure of life of the commission did not help to instill enthusiasm for the work to be undertaken by the commission.

As a result of a recommendation of the joint special committee on public expenditures of the general court, this commission was legislated out of existence by chapter 73 of the acts of 1933. This act was signed by the governor on March 14, 1933. Funds were appropriated to permit the commission to function until May 31, 1933.

INDUSTRIAL STUDIES

Many industrial studies of a minor nature have been undertaken from time to time in answer to queries from prospective manufacturers and other interested parties.

A comparison of population trends, net debt and bonded indebtedness of certain Massachusetts communities, the commonwealth and two competing states was made for interests desirous of locating in this state.

A study was made which brought out the fact that very small manufacturing plants possess a very precarious existence under modern industrial conditions. It was shown that nearly sixty per cent of the manufacturing establishments which went out of business in 1931 were small plants employing ten or fewer wage earners.

A study of comparative rates of workmen's compensation insurance coverage in certain trades in all the states where this form of insurance exists was made to determine whether or not the manufacturers in this state were handicapped in competing with other states. Charts were made which presented these data in graphic form, and which were distributed to interested parties for their information.

A brief but comprehensive study of the economic status of the Commonwealth was made for publication in the Boston Sunday Herald of January 8, 1933. This survey showed that Massachusetts was better off than many other states after three years of depression, and that the prevalence of industries here which produce the necessities of life, such as textiles and footwear, would result in a quicker recovery in this state than in certain other states in which the production of luxury products dominates the industrial structure.

The commission has continued its surveys of new manufacturing plants in the state, and has released the information to the newspapers as soon as compiled.

A talk was arranged at which Mr. Carl Buschmann addressed a selected group of manufacturers and exporters on the foreign trade possibilities of the west coast of Africa, together with the steps which Massachusetts interests should take to profit from this fertile and as yet undeveloped market.

The report on the mineral resources of Massachusetts, which was prepared during the preceding year, was widely distributed to responsible parties, and received considerable publicity in newspapers, technical journals and other publications.

Legislative Program

The secretary of the commission supported the bill in the legislature which would allow women to work from six to ten o'clock in the evening.

It was felt that only in this way could the textile industry of this state operate on a double-shift basis when necessary and thus compete on even terms with other states which permit longer work periods.

As a result of complaints made by rubber manufacturers in the state, several letters were sent to the Massachusetts senators and representatives in congress regarding modifications to the tariff laws which would remove the existing handicaps in competition with the foreign manufacture of rubber products.

Direct Mail Campaign

The commission sent three thousand five hundred letters to the mayors in Massachusetts, chairmen of the boards of selectmen of the state, advertising agents, tourist agencies, chambers of commerce, daily and weekly newspapers, magazines throughout the United States and Canada, school superintendents, college bursars and members of the Associated Industries of Massachusetts, enclosing copies of the "Massachusetts folder" and "A Directory of Stopping Places in Massachusetts for Tourists and Vacationists."

The letter suggested that the commission would supply as many additional copies of the pamphlets as requested, provided the inquirer would distribute those pamphlets to out-of-state residents where they would do the most good.

This letter brought requests for 9,352 "Massachusetts folders" and 7,158 copies of "A Directory of Stopping Places in Massachusetts for Tourists and Vacationists." We satisfied the requests for the "Massachusetts folders" and sent 468 "Directories," exhausting our supply, and leaving a balance unfilled of 6,690 "Directories." Many of those commended the movement and agreed to co-operate to bring additional revenue into Massachusetts during 1933.

Week-Ends in Boston

The commission brought together representatives of railroads, steamship lines, hotels, theaters, baseball clubs, sight seeing bus lines, and the Boston chamber of commerce, to develop a plan to bring visitors into Boston for week-ends during the summer of 1933. Five meetings were held in all, attended by approximately forty members at each meeting.

When we realize that one thousand two hundred people are brought into Boston by a Boston & Albany Sunday afternoon excursion, and one thousand eight hundred people taking a Sunday tour of Massachusetts Bay on the Eastern Steamship Line boat, turning away as many as one thousand people, it is not extraordinary to predict that this movement will bring five thousand people a week into Boston, for a period of seventeen weeks at a cost of ten dollars each, making a total revenue of $850,000. One hundred one thousand copies of the "Week-Ends in Boston" leaflet are being distributed by the ticket offices of the transportation lines within two hundred miles of Boston, and all the interests concerned are helping to put over this program.

Radio Broadcasts

Beginning in April and continuing until June, there was delivered a series of radio talks on the advantages of Massachusetts over Stations WBZ, WBZA and W1XAZ. These stations having kindly granted the commission the time and use of their facilities for this purpose.

Following is a list of the speakers and the subjects of their talks arranged by the commission:

Date 1933	*Subject and Speaker*
April 9	Massachusetts — Her Industrial, Agricultural and Recreational Assets: Mr. John T. Scully, Executive Secretary of the Massachusetts Industrial and Development Commission.
April 16	Present Situation at the Port of Boston: Mr. Richard Parkhurst, Vice-Chairman, Boston Port Authority.

April 30 Historical Boston: Mr. Thomas A. Mullen.
May 7 Present Situation in the Shoe and Leather Trade: Mr. Thomas F. Anderson, Secretary, New England Shoe and Leather Association.
May 14 Pertinent Facts on the Textile Industry: Mr. Allyn B. McIntire, Vice-President of the Pepperell Manufacturing Company.
May 21 Massachusetts, An Ideal State for the Home Owner: Mr. James D. Henderson from the firm of Henderson & Ross.
May 28 The World Loves Old Cape Cod: Honorable Donald W. Nicholson, Senator from Cape and Plymouth District.
June 4 Recreational Attractions of Western Massachusetts: Honorable Theodore R. Plunkett, Senator from Berkshire District.

At practically each broadcast, Miss June Sherel gave a short reading which bore a relation to the subject discussed by the guest speaker.

The commission acknowledges its grateful appreciation of the generous co-operation of the distinguished persons who made possible this program of publicity for our state, also the radio stations concerned.

Cape Cod Survey

The commission authorized Professor Richard P. Doherty of the Bureau of Business Research of Boston University to make an economic survey of Cape Cod. Unfortunately, it was impossible to complete and submit this report of the survey before the termination of the activities of the commission.

This report with its facts and recommendations contained therein should be very valuable, particularly to the residents of Cape Cod.

Division of Commercial Fisheries

On November 10, 1932, the commission held a public hearing to listen to statements made by the fishermen, boat owners and fish dealers regarding the conditions existing in the fishing industry and to devise plans to benefit the industry.

In all six meetings were held before the bill was drawn and presented for consideration before the committee on state administration.

As a result of the Governor's visit to the Fish Pier and recommendations in his inaugural address, the bill referred to, Senate No. 366, providing for a "division of commercial fisheries to be created within the department of agriculture" received the approval of the committee on state administration, and was passed by the senate.

While there was some reason advanced to place the division within the department of conservation, all the fishing interests represented at the meetings were satisfied that the matter could be better handled under the department of agriculture. At this writing, the bill is in the house ways and means committee.

One thing, at least, has been accomplished by the commission for the varied fishing interests,—namely, it brought together these interests, several of whom had opposite views and showed a lack of confidence in each other. They were in accord with the main idea that it was very necessary for a state agency to take hold of the fishing industry to save it from demoralization. The commission merely translated the views of the various interests into a definite set-up for the study and control of their problem and the promotion of the business. The necessary legislation will probably pass within a few days to satisfactorily take care of the commercial fisheries problem.

Conclusion

This is the final report of the Massachusetts Industrial and Development Commission, discharged by the legislature in the name of economy.

Promotional work of the character performed by the commission cannot be measured by the immediate financial returns to the state as, for instance, in license fees or permits.

The benefits obtained from this division of state service accrue to the business interests who appreciate the value of the services performed.

At another time it is quite likely, the legislature would have appropriated $100,000 a year to permit the commission to conduct a proper publicity campaign, but at the present time the all-impelling force seems to be economy.

If there is any merit to the newspaper, magazine and radio publicity campaign of the New England Council —

If there is merit to the advertising campaigns of Maine and New Hampshire, and —

If there is to be expected a financial return from the advertising campaigns of the large industries, then that is sufficient reason to believe that Massachusetts would receive a financial return of millions of dollars through an expenditure of $100,000 a year.

In view of the potentialities of the commission, it seems inadvisable to have abolished this board at an annual cost of $18,000 to $20,000 a year that performed a service to the business of the state as this commission has done and would continue to do to a higher degree.